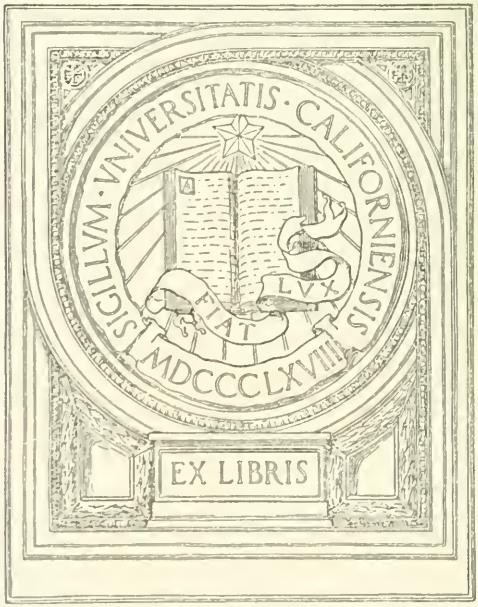

Surface Water Supply of Illinois

Central and Southern Portions

1908—1910

The Internal Improvement Commission

of Illinois

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SURFACE WATER SUPPLY OF ILLINOIS, CENTRAL AND SOUTHERN PORTION, 1908-10.

INTRODUCTION.

Authority for Investigations:

This volume contains the results of flow measurements on certain streams in the State of Illinois. The work was performed by the water-resources branch of the United States Geological Survey, M. O. Leighton, hydrographer, in coöperation with the Internal Improvement Commission of Illinois, Isham Randolph, chairman. The Internal Improvement Commission paid for all the field work; the cost of the office computations was borne by the Commission and the Survey. The Geological Survey also furnished all instruments and supervised and directed the work. The authority for this expenditure is contained in the organic law of the Internal Improvement Commission (Session Laws, Forty-fifth General Assembly, Adjourned Session, p. 33), which provides, among other things, as follows:

"The duties of the Commission shall be to investigate * * * the reclamation of lands subject to overflow or inundation, * * * and such other statistics and data as will enable the next General Assembly to properly formulate and devise ways and means whereby legislative enactment may be had to carry out and put into effect the benefits to be derived by the * * * reclamation of lands subject to inundation in Illinois."

Inasmuch as the study of run-off is the first consideration in connection with drainage projects and because the establishment of the height and distance between levees which are designed to control the entire flood flow of a stream involves the determination of the volume of water that will come down the valley, these investigations are well within the authority of the law.

The work has been supported since the fiscal year ending June 30, 1909, from funds provided in the Omnibus Appropriation Act of the Forty-sixth General Assembly passed June 3, 1909, and entitled:

"An Act to provide for the ordinary and contingent expenses of the State Government until the expiration of the fiscal quarter after the adjournment of the next regular session of the General Assembly."

Section 70 of this Act appropriates "to the Internal Improvement Commission * * * for survey of rivers and study of water supply and all other necessary expenses for the work of the Commission the sum of $30,000.00."

Scope of Investigation:

These investigations are not complete nor do they include all the river system or parts thereof that might purposefully be studied. The scope of the work is limited to that which can be provided with the appropriations available. The field covered and the character of the work are believed to be the best that could be accomplished under the controlling conditions.

The investigations have been concentrated upon streams in the central and southern portion of the State where water supply, prevention of overflow and reclamation of swamp land make the strongest appeal for immediate study of the problems.

It is essential that records of stream flow shall be maintained during a period of years sufficient to cover all stages, in order that within reasonable limits the entire range of flow from the absolute maximum to the absolute minimum may be determined. The length of such a period manifestly varies for different streams and cannot be absolutely determined. Experience has shown that the records should cover from five to ten years, or for some streams twenty years or more, the limit being determined by the relative importance of the stream and the interdependence of the results and other long-time records on adjacent streams.

The records herein set forth cover a period of over two years and indicate a fairly completed range of flow from maximum to minimum. The gauging stations are being maintained under the present appropriation and the records will be kept as long as the General Assembly sees fit to appropriate funds for the purpose.

In all engineering work there is a point of refinement beyond which it is needless and wasteful to proceed, and this principle applies with especial force to stream-flow measurements. It is confidently believed that with some unavoidable exceptions the stream-flow data presented in this publication are sufficiently accurate for all practical purposes.

It must be borne in mind, however, that these records extend over a comparatively short period of time and all persons are cautioned to use the greatest care in the utilization of such incomplete records.

Purposes of the Work:

Among the purposes for which the results contained in this volume are requisite are navigation, domestic water supply, water power, swamp and overflow land drainage, and flood prevention. The demands of all these interests are immediate.

Navigation:

At the general election of Nov. 3, 1908, the Constitution was amended by popular vote, and the General Assembly was authorized to issue twenty million dollars in bonds for the construction of a waterway from Joliet, Ill., to Utica, Ill. The further extension of this waterway to the Gulf is under consideration by Congress and there is already an eight-foot

navigation below Utica. With the completion of the Lockport-Utica link in this waterway there will be opened up through the heart of the State and along its western border 550 miles of navigable trunk line waterway. There are also about 125 miles of navigable waterway on the Ohio river along the southern boundary, and the Wabash is navigable along the eastern border. When the State and federal governments become committed to a definite policy of inland waterway improvements the development of the tributaries to these trunk waterways become of paramount importance. It is obvious that the determination of stream-flow is necessary to the intelligent solution of the many problems involved.

Domestic Water Supply:

The highest use of water is that of domestic supply, and while the State interest in this aspect of the matter is less direct than in the aspects already named, this use of water nevertheless has so broad a significance with respect to the general welfare that the State government is ultimately and intimately concerned.

Water Power:

The time is rapidly approaching when the development of the water power of the country will be an economic necessity. Our stock of coal is being rapidly depleted and the cost of steam power is increasing accordingly. Industry will cease its growth if cheap power is not available. Water power is the only avenue now open. When the electric transmission of power was accomplished the relation of our water powers to economic conditions changed entirely. Previous to the day of electric transmission the importance of a water power was largely confined to the locality at which it was generated, but it has now become a public utility in which the individual citizen is vitally interested.

There is a great paucity of accurate observation as to the amount of water power available within the State, and inasmuch as the amount of water power that may be made available is dependent on the flow of rivers, the investigation of flow becomes a prerequisite in the judicial management of this source of energy.

There are practically no water power sites on any of the streams that have been studied up to the date of this report, and studies and investigations should be extended to cover those streams upon which there are opportunities for the development of water power.

Drainage of Swamp and Overflowed Lands:

There are approximately 3,000 square miles of land subject to overflow along our intra-state streams. Probably 90 per cent of the bottom lands of the State are unprotected or inadequately protected against floods and it is estimated that if they could all be brought under successful cultiva-

tion there would be added to the farm value of the State over one hundred million dollars. There would also be additional benefits to be derived from improved health conditions.

The study of run-off is the first consideration in connection with drainage projects. If, by the drainage of a large area into any particular channel, that channel becomes so gorged with water which it had not hitherto been called upon to convey, that overflow conditions are created in places where previously the land was not subject to inundation, then drainage results merely in an exchange of land values. This is not the purpose of drainage improvement. By making use of the data in this report such a contingency as mentioned above would be avoided.

Flood Prevention:

The damage from floods to property and crops in the Illinois bottoms is enormous. No careful estimate of the monetary loss has been made, owing to the absence of comprehensive data, but these losses are not merely local in effect. They constitute an annual tax on the property in large areas of the State which should be reduced in the orderly progress of government.

It goes without saying that any consideration of flood prevention must be based on a thorough knowledge of stream-flow, both in the contributing areas which furnish the water and along the lowland rivers.

Publications:

The data on stream-flow collected by the Illinois coöperation appears here in print for the first time, and the records of most of the stations discussed in this report extend over a period of more than two years.

The order of treatment of stations in each basin in these papers is downstream. The main stream of any river is determined on the basis of drainage area. After all stations from the source to the mouth of the main stem of the river have been given, the tributaries are taken up in regular order from source to mouth. The tributaries are treated the same as the main stream, all stations in each tributary basin being given before taking up the next one below.

The studies and investigations of stream flow in the State of Illinois will be continued until the appropriation for the current fiscal quarter is exhausted. Their further continuance and publication being dependent upon further appropriation and authority.

Definition of Terms:

The volume of water flowing in a stream—the "run-off" or "discharge"—is expressed in various terms, each of which has become associated with a certain class of work. These terms may be divided into two groups: (1) Those which represent a rate of flow, as second-feet, gallons per minute, miner's inches, and run-off in second-feet per

square mile, and (2) those which represent the actual quantity of water, as run-off in depth in inches and acre-feet. They may be defined as follows:

"Second-foot" is an abbreviation for cubic foot per second and is the rate of discharge of water flowing in a stream 1 foot wide, 1 foot deep, at a rate of 1 foot per second. It is generally used as a fundamental unit from which others are computed by the use of the factors given in the following table of equivalents.

"Gallons per minute" is generally used in connection with pumping and city water supply.

The "miner's inch" is the rate of discharge of water that passes through an orifice 1 inch square under a head which varies locally. It is commonly used by miners and irrigators throughout the West and is defined by statute in each state in which it is used.

"Second-feet per square mile" is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the run-off is distributed uniformly both as regards time and area.

"Run-off in inches" is the depth to which the drainage area would be covered if all the water flowing from it in a given period were conserved and uniformly distributed on the surface. It is used for comparing run-off with rainfall, which is usually expressed in depth in inches.

"Acre-foot" is equivalent to 43,560 cubic feet, and is the quantity required to cover an acre to the depth of 1 foot. It is commonly used in connection with storage for irrigation work.

Convenient Equivalents:

The following is a list of convenient equivalents for use in hydraulic computations:

1 second-foot equals 40 California miner's inches (law of March 23, 1901).
1 second-foot equals 38.4 Colorado miner's inches.
1 second-foot equals 40 Arizona miner's inches.
1 second-foot equals 7.48 United States gallons per second; equals 448.8 gallons per minute; equals 646,272 gallons for one day.
1 second-foot equals 6.23 British imperial gallons per second.
1 second-foot for one year covers 1 square mile 1.131 feet or 13.572 inches deep.
1 second-foot for one year equals 31,536,000 cubic feet.
1 second-foot equals about 1 acre-inch per hour.
1 second-foot for one day covers 1 square mile 0.03719 inch deep.
1 second-foot for one 28-day month covers 1 square mile 1.041 inches deep.
1 second-foot for one 29-day month covers 1 square mile 1.079 inches deep.
1 second-foot for one 30-day month covers 1 square mile 1.116 inches deep.
1 second-foot for one 31-day month covers 1 square mile 1.153 inches deep.
1 second foot for one day equals 1.983 acre-feet.
1 second foot for one 28-day month equals 55.54 acre-feet.
1 second-foot for one 29-day month equals 57.52 acre-feet.
1 second-foot for one 30-day month equals 59.50 acre-feet.
1 second-foot for one 31-day month equals 61.49 acre-feet.
100 California miner's inches equal 18.7 United States gallons per second.
100 California miner's inches equal 96.0 Colorado miner's inches.
100 California miner's inches for one day equal 1.96 acre-feet.
100 Colorado miner's inches equals 2.60 second-feet.
100 Colorado miner's inches equals 19.5 United States gallons per second.
100 Colorado miner's inches equal 104 California miner's inches.
100 Colorado miner's inches for one day equal 5.17 acre-feet.
100 United States gallons per minute equal 0.223 second-foot.
100 United States gallons per minute for one day equal 0.442 acre-foot.

1,000,000 United States gallons per day equal 1.55 second-feet.
1,000,000 United States gallons equal 3.07 acre-feet.
1,000,000 cubic feet equal 22.95 acre-feet.
1 acre-foot equals 325,850 gallons.
1 inch deep on 1 square mile equals 2,323,200 cubic feet.
1 inch deep on 1 square mile equals 0.0737 second-foot per year.
1 foot equals 0.3048 meter.
1 mile equals 1.60935 kilometers.
1 mile equals 5,280 feet.
1 acre equals 0.4047 hectare.
1 acre equals 43,560 square feet.
1 acre equals 209 feet square, nearly.
1 square mile equals 2.59 square kilometers.
1 cubic foot equals 0.0283 cubic meter.
1 cubic foot equals 7.48 gallons.
1 cubic foot of water weighs 62.5 pounds.
1 cubic meter per minute equals 0.5886 second-foot.
1 horse power equals 550 foot-pounds per second.
1 horse power equals 76.0 kilogram-meters per second.
1 horse power equals 746 watts.
1 horse power equals 1 second-foot falling 8.80 feet.
1⅓ horse power equal about 1 kilowatt.

To calculate water power quickly $\frac{\text{Sec.-ft. x fall in feet}}{11}$ equals net horse power on water wheel realizing 80 per cent of theoretical power.

Explanation of Tables:

For each drainage basin there is given a brief description of general conditions covering such features as area, source, tributaries, topography, geology, conditions of forestation, rainfall, ice conditions, storage, power possibilities, and other special features of importance or interest, including the climatological data printed in the appendix.

For each regular current-meter gaging station are given in general, and so far as available, the following data:

Description of station, list of discharge measurements, table of daily gage heights, daily discharge, discharge table and monthly estimates for each of the following stations from date of establishment to June 30, 1910:

1. Big Muddy River at Cambon, Illinois.
2. Beaucoup Creek near Pinckneyville.
3. Embarras River near Oakland.
4. Embarras River at St. Marie.
5. Kaskaskia River near Arcola.
6. Kaskaskia River at Shelbyville.
7. Kaskaskia River at Vandalia.
8. Kaskaskia River at Carlyle.
9. Kaskaskia River at New Athens.
10. Shoal Creek near Breese.
11. Silver Creek near Lebanon.
12. Skillet Fork River near Wayne City.
13. Sangamon River near Monticello.
14. Sangamon River at Riverton.
15. Sangamon River near Oakford.
16. Salt Creek near Kenney.
17. South Fork of Sangamon, Fork of Sangamon River near Taylorville.

Also description, discharge measurements and daily gage heights for each of the following stations:

1. Cahokia Creek near Poag, Illinois.
2. Little Wabash River near Clay City.
3. Little Wabash River near Golden Gate.
4. Little Wabash River near Carmi.
5. Skillet Fork River near Mill Shoals.

No discharge table was made for any of these latter stations for reasons given in the description of the tables.

In addition to statements regarding the location and installation of current-meter stations, the descriptions give information in regard to any conditions which may affect the constancy of the relation of gage height to discharge, covering such points as ice, shifting conditions of flow, and backwater; also, full information regarding diversions which decrease the total flow at the measuring section. Statements are also made regarding the accuracy and reliability of the data.

The discharge-measurement table gives the results of the discharge measurements made during the year, including the date, name of hydrographer, width and area of cross section, gage height and discharge in second-feet.

The table of daily gage heights gives the daily fluctuations of the surface of the river as found from the gage readings taken each day. At most stations the gage is read once per day, either in the morning or in the evening. The gage height given in the table represents the elevation of the surface of the water above the zero of the gage. All gage heights during ice conditions, backwater from obstructions, etc., are published as recorded, with suitable foot notes. The rating is not applicable for such periods unless the proper correction to the gage heights is known and applied. Attention is called to the fact that the zero of the gage is placed at an arbitrary datum and has no relation to zero flow or the bottom of the river. In general, the zero is located somewhat below the lowest known flow, so that negative readings shall not occur.

The discharge measurements and gage heights are the base data from which the rating tables and monthly discharge tables are computed.

The rating table gives either directly or by interpolation the discharge in second-feet, corresponding to every stage of the river recorded during the period for which it is applicable.

In the table of monthly discharge the column headed "Maximum" gives the mean flow, as determined from the rating table, for the day when the mean gage height was highest. As the gage height is the mean for the day, it does not indicate correctly the period when the water surface was at crest height and the corresponding discharge consequently larger than given in this column. Likewise, in the column of "Minimum" the quantity given is the mean flow for the day when the mean gage height was lowest. The column headed "Mean" is the average flow in cubic feet for each second during the month. On this the computations for the remaining columns, which are defined on page 7, are based.

In the tables of climatological data (appendix) are given, for each of the stations in the three sections of Illinois, designated as sections 64, 65 and 66 of the Climatological Division of the Weather Bureau of the

Department of Agriculture; the precipitation, monthly, annual and average amounts (in inches and hundreds); the average number of days with .01 inch or more of precipitation; the average snowfall; the mean temperature; the lowest temperature; prevailing wind direction; highest temperature; mean relative humidity; average hourly wind movement (in miles); frost data, monthly and annual mean precipitation for the year 1909, with departures from the normal; monthly and annual mean temperature for the year 1909, with departures from the normal; monthly maximum temperatures for the year 1909, with dates; monthly minimum temperature for the year 1909, with dates, and a list of the coöperative observers for each station in the three sections.

Field Methods of Measuring Stream Flow:

There are three distinct methods of determining the flow of open-channel streams: (1) by measurements of slope and cross section and the use of Chezy's and Kutter's formulas; (2) by means of a weir or dam; (3) by measurements of the velocity of the current and of the area of the cross section. The method chosen depends on the local physical conditions, the degree of accuracy desired, the funds available and the length of time that the record is to be continued. The velocity method has been used exclusively in these determinations and a description of this method is therefore considered sufficient.

Velocity Method:

Streams in general present throughout their courses to a greater or less extent all conditions of permanent, semi-permanent and varying conditions of flow. In accordance with the location of the measuring section with respect to these physical conditions, current-meter gaging stations may in general be divided into four classes: (1) those with permanent conditions of flow; (2) those with beds which change only during extreme high water; (3) those with beds which change frequently, but which do not cause a variation of more than about 5 per cent of the discharge curves from year to year, and (4) those with constantly shifting beds. In determining the daily flow, different office methods are necessary for each class. The field data on which the determinations are based and the methods of collecting them are, however, in general the same.

Great care is taken in the selection and equipment of gaging stations for determining discharge by velocity measurements, in order that the data may have the required degree of accuracy. They are located as far as possible, at such points that the relation between gage height and discharge will always remain constant for any given stage. The experience of engineers of the geological survey has been that permanency of conditions of flow is the prime requisite of any current-meter gaging station when maintained for several years, unless funds are available to cover all changes in conditions of flow. A straight, smooth section, without cross currents, backwater, boils, etc., at any stage, is highly desirable; but on most streams it is not attainable, except at the cost of

a cable equipment. Rough permanent sections, if measurements are properly made by experienced engineers, taking measuring points at a distance apart of 2 to 5 per cent, or less, of a total width, will, within reasonable limits, yield better results for a given outlay of money than semi-permanent or shifting sections with smooth, uniform current. So far as possible, stations are located where the banks are high and not subject to overflow at high stages, and out of the influence of tributary streams, dams, or other artificial obstructions which might affect the relation between gage height and discharge.

A gaging station consists essentially of a gage for determining the daily fluctuations of stage of the river and some structure or apparatus from which discharge measurements are made, usually a bridge or cable.

The two factors required to determine the discharge of a stream past a section perpendicular to the mean direction of the current are the area of the cross section and the mean velocity of flow normal to that section.

In making a measurement with a current meter a number of points, called measuring points, are measured off above and in the plane of the measuring section at which observations of depth and velocity are taken. These points are spaced equally for those parts of the section where the flow is uniform and smooth and are spaced unequally for other parts, according to the discretion and judgment of the engineer. In general, the points should not be spaced farther apart than 5 per cent of the distance between piers, nor farther apart than the approximate mean depth of the section at the time of measurement.

The measuring points divide the total cross section into elementary strips, at each end of which observations of depth and velocity are made. The discharge of any elementary strip is the product of the average of the depths at the two ends times the width of the strip times the average of the mean velocities at the two ends of the strip. The sum of the discharges of the elementary strips is the total discharge of the stream. (For a discussion of methods of computing the discharge of a stream, see Engineering News, June 25, 1908.)

Depths for the determination of the area are usually obtained by sounding with the current meter and cable. In rough sections or swift current, an ordinary weight and cable are used, particular care being taken that all observations shall be in the plane of the cross section.

Two methods of determining the velocity of flow of a stream are in general use—the float method and the current-meter method.

The float method, with its various modifications of surface, subsurface and tube or rod floats, is now considered obsolete in the ordinary practice of the United States Geological Survey. The use of this method is limited to special conditions where it is impracticable to use the current meter, such as in places where large quantities of ice or debris which may damage the meter are flowing with the current, and for miscellaneous measurements or other work where a high degree of accuracy is not necessary. Tube floats are very satisfactory for use in canals with regular bottoms and even flow of current. Measurements by the float method are made as follows: The velocity of flow of the stream is

obtained by observing the time which it takes floats set free at different points across the stream to pass between two range lines about 200 feet apart. The area used is the mean value obtained from several cross sections measured between the two range lines. The chief disadvantages of this method are difficulty in obtaining the correct value of mean area for the course used and uncertainty regarding the proper coefficient to apply to the observed velocity.

The Price current meter is now used almost to the exclusion of other types of meters by the United States Geological Survey in the determination of the velocity of flow of water in open channels, a use for which it is adapted under practically all conditions. Briefly, the meter consists of six cups attached to a vertical shaft which revolves on a conical hardened steel point when immersed in moving water. The revolutions are indicated electrically. The rating, or relation between the velocity of the moving water and the revolutions of the wheel, is determined for each meter by drawing it through still water for a given distance at different speeds and noting the number of revolutions for each run.

From these data a rating table is prepared which gives the velocity per second of moving water for any number of revolutions in a given time interval. The ratio of revolutions per second to velocity of flow in feet per second is very nearly a constant for all speeds and is approximately 0.45.

Three classes of methods of measuring velocity with current meters are in general use—multiple-point, single-point, and integration.

The two principal multiple-point methods in general use are the vertical curve and 0.2 and 0.8 depth.

In the vertical velocity curve method a series of velocity determinations are made in each vertical at regular intervals, usually about 10 to 20 per cent of the depth apart. By plotting these velocities as abscissas and their depths as ordinates and drawing a smooth curve among the resulting points, the vertical velocity curve is developed. This curve shows graphically the magnitude and changes in velocity from the surface to the bottom of the stream. The mean velocity in the vertical is then obtained by dividing the area bounded by this velocity curve and its axis by the depth. This method of obtaining the mean velocity in the vertical is probably the best known, but on account of the length of time required to make a complete measurement, its use is largely limited to the determination of coefficients for purposes of comparison and to measurements under ice.

In the second multiple-point method the meter is held successively at 0.2 and 0.8 depth, and the mean of the velocities at these two points is taken as the mean velocity for that vertical. On the assumption that the vertical velocity curve is a common parabola with horizontal axis, the mean of the velocities at 0.22 and 0.79 depth will give (closely) the mean velocity in the vertical. Actual observations under a wide range of conditions show that this multiple-point method gives the mean velocity very closely for open-water conditions and that in a completed measurement it seldom varies as much as 1 per cent from the value

given by the vertical velocity curve method. Moreover, the indications are that it holds nearly as well for ice-covered rivers. It is very extensively used in the regular practice of the United States Geological Survey.

The single-point method consists in holding the meter either at the depth of the thread of mean velocity, or at an arbitrary depth for which the coefficient for reducing to mean velocity has been determined or must be assumed.

Extensive experiments by means of vertical velocity curves show that the thread of mean velocity generally occurs between 0.5 and 0.7 total depth. In general practice the thread of mean velocity is considered to be at 0.6 depth, and at this point the meter is held in most of the measurements made by the single-point method. A large number of vertical velocity curve measurements, taken on many streams and under varying conditions, show that the average coefficient for reducing the velocity obtained at 0.6 depth to mean velocity is practically unity. The variation of the coefficient from unity in individual cases is, however, greater than in the 0.2 and 0.8 method, and the general results are not as satisfactory.

In the other principal single-point method the meter is held near the surface, usually 1 foot below, or low enough to be out of the effect of the wind or other disturbing influences. This is known as the sub-surface method. The coefficient for reducing the velocity taken at the sub-surface to the mean has been found to be in general from about 0.85 to 0.95, depending on the stage, velocity and channel conditions. The higher the stage the larger the coefficient. The method is especially adapted for flood measurements, or when the velocity is so great that the meter can not be kept in the correct position for the other methods.

The vertical integration method consists in moving the meter at a slow, uniform speed from the surface to the bottom and back again to the surface and noting the number of revolutions and the time taken in the operation. This method has the advantages that the velocity at each point of the vertical is measured twice. It is useful as a check on the point methods. In using the Price meter great care should be taken that the vertical movement of the meter is not rapid enough to vitiate the accuracy of the resulting velocity.

The determination of the flow of an ice-covered stream is difficult, owing to diversity and instability of conditions during the winter period, and also to lack of definite information in regard to the laws of flow of water under ice. The method now employed is to make frequent discharge measurements during the frozen periods by the 0.2 and 0.8 and the vertical velocity curve methods, and to keep an accurate record of the conditions, such as the gage height to the surface of the water as it rises in a hole cut in the ice, and the thickness and character of the ice. From these data an approximate estimate of the daily flow can be made by constructing a rating curve (really a series of curves) similar to that used for open channels, but considering, in addition to gage heights and discharge, the varying thickness of ice.

Office Methods of Computing and Studying Discharge and Run-Off:

At the end of each year the field or base data for current-meter gaging stations, consisting of daily gage heights, discharge measurements, and full notes, are assembled. The measurements are plotted on cross-section paper and rating curves are drawn wherever feasible. The rating tables prepared from these curves are then applied to the tables of daily gage heights to obtain the daily discharge and from these applications the tables of monthly discharge and run-off are computed.

Rating curves are drawn and studied with special reference to the class of channel conditions which they represent. The discharge measurements for all classes of stations when plotted with gage heights in feet as ordinates and discharges in second-feet as abscissas define rating curves which are more or less generally parabolic in form. In many cases curves of area in square feet and mean velocity in feet per second are also constructed to the same scale of ordinates as the discharge curve. These are used mainly to extend the discharge curves beyond the limits of the plotted discharge measurements, and for checking purposes to avoid errors in the form of the discharge curve and to determine and eliminate erroneous measurements.

For every published rating table the following assumptions are made for the period of application of the table: (a) That the discharge is a function of and increases gradually with the stage; (b) that the discharge is the same whenever the stream is at a given stage, and hence such changes in conditions of flow as may have occurred during the period of application are either compensating or negligible, except that the rating as stated in the footnote of each table is not applicable for known conditions of ice, log jams, or other similar obstructions; (c) that the increased and decreased discharge due to change of slope on rising and falling stages is either negligible or compensating.

As already stated, the gaging stations may be divided into several classes, as indicated in the following paragraphs:

The stations of Class 1 represent the most favorable conditions for an accurate rating and are also the most economical to maintain. The bed of the stream is usually composed of rock and is not subject to the deposit of sediment and loose material. This class includes also many stations located in a pool below which is a permanent rocky riffle that controls the flow like a weir. Provided the control is sufficiently high and close to the gage to prevent cut and fill at the gaging point from materially affecting the slope of the water surface, the gage height will for all practical purposes be a true index of the discharge. Discharge measurements made at such stations usually plot within 2 or 3 per cent of the mean-discharge curve and the rating developed from that curve represents a very high degree of accuracy.

Class 2 is confined mainly to stations on rough mountainous streams with steep slopes. The beds of such streams are, as a rule, comparatively permanent during low and medium stages, and when the flow is sufficiently well defined by an adequate number of discharge measurements before and after each flood the stations of this class give nearly as good

results as those of Class 1. As it is seldom possible to make measurements covering the time of change at flood stage, the assumption is often made that the curves before and after the flood converged to a common point at the highest gage height recorded during the flood. Hence the only uncertain period occurs during the few days of highest gage heights covering the period of actual change in conditions of flow.

Class 3 includes most of the current-meter gaging stations maintained by the United States Geological Survey. If sufficient measurements could be made at stations of this class, results would be obtained nearly equaling those of Class 1, but owing to the limited funds at the disposal of the Survey this is manifestly impossible, nor is it necessary for the uses to which discharge data are applied. The critical points are, as a rule, at relatively high or low stages. The percentage error, however, is greater at low stages. No absolute rule can be laid down for stations of this class. Each rating curve must be constructed mainly on the basis of the measurements of the current year, the engineer being guided largely by the past history of the station and the following general law: If all measurements ever made at a station of this class are plotted on cross-section paper, they will define a mean curve which may be called a standard curve. It has been found in practice that if, after a change caused by high stage, a relatively constant condition of flow occurs at medium and low stages, all measurements made after the change will plot on a smooth curve which is practically parallel to the standard curve with respect to their ordinates, or gage heights. This law of the parallelism of ratings is the fundamental basis of all ratings and estimates at stations with semi-permanent and shifting channels. It is not absolutely correct, but, with few exceptions, answers all the practical requirements of estimates made at low and medium stages after a change at a high stage. This law appears to hold equally true whether the change occurs at the measuring section or at some controlling point below. The change is, of course, fundamentally due to change in the channel caused by cut, or fill, or both, at and near the measuring section. For all except small streams the changes in section usually occur at the bottom. The following simple, but typical, examples illustrate this law:

(a) If 0.5 foot of planking were to be nailed on the bottom of a well-rated wooden flume of rectangular section there would result, other conditions of flow being equal, new curves of discharge, area, and velocity, each plotting 0.5 foot above the original curves when referred to the original gage. In other words, this condition would be analogous to a uniform fill or cut in a river channel which either reduces or increases all three values of discharge, area, and velocity for any gage height. In practice, however, such ideal conditions rarely exist.

(b) In the case of a cut or fill at the measuring section there is a marked tendency toward decrease or increase, respectively, of the velocity. In other words, the velocity has a compensating effect, and if the compensation is exact at all stages the discharge at a given stage will be the same under both the new and the old conditions.

(c) In the case of uniform change along the crest of a weir or rocky controlling point, the area curve will remain the same as before the change, and it can be shown that here again the change in velocity curve is such that it will produce a new discharge curve essentially parallel to the original discharge curve with respect to their ordinates.

Of course in actual practice such simple changes of section do not occur. The changes are complicated and lack uniformity, a cut at one place being largely offset by a fill at another and vice versa. If these changes are very radical and involve large percentages of the total area—as, for example, on small streams—there may result a wide departure from the law of parallelism of ratings. In complicated changes of section the corresponding changes in velocity which tend to produce a new parallel discharge curve may interfere with each other materially, causing eddies, boils, backwater, and radical changes in slope. In such extreme conditions, however, the measuring section would more properly fall under Class 4 and would require very frequent measurements of discharge. Special stress is laid on the fact that in the lack of other data to the contrary the utilization of this law will yield the most probable results.

Slight changes at low or medium stages of an oscillating character are usually averaged by a mean curve drawn among them parallel to the standard curve, and if the individual measurements do not vary more than 5 per cent from the rating curve the results are considered good for stations of this class.

Class 4 comprises stations that have soft, muddy, or sandy beds. Good results can be obtained from such sections only by frequent discharge measurements, the frequency varying from a measurement every two or three weeks to a measurement every day, according to the rate of diurnal change in conditions of flow. These measurements are plotted and a mean or standard curve drawn among them. It is assumed that there is a different curve for every day of the year and that this rating is parallel to the standard curve with respect to their ordinates. On the day of measurement the rating curve for that day passes through that measurement. For days between successive measurements it is assumed that the rate of change is uniform, and hence the ratings for the intervening days are equally spaced between the ratings passing through the two measurements. This method must be modified or abandoned altogether under special conditions. Personal judgment and a knowledge of the conditions involved can alone dictate the course to pursue in such cases.

The computations have, as a rule, been carried to three significant figures. Computation machines, Crelle's tables, and the 20-inch slide rule have been generally used. All computations are carefully checked.

After the computations have been completed they are entered in tables and carefully studied and intercompared to eliminate or account for all gross errors, so far as possible. Missing periods are filled in, so far as is feasible, by means of comparison with adjacent streams. The attempt

is made to complete years or periods of discharge, thus eliminating fragmentary and disjointed records. Full notes accompanying such estimates follow the monthly discharge tables.

For most of the stations estimates have been made of the monthly discharge during frozen periods. These are based on measurements under ice conditions wherever available, daily records of temperature and precipitation obtained from the United States Weather Bureau climate and crop reports, observers' notes of conditions, and a careful and thorough intercomparison of results with adjacent streams. Although every care possible is used in making these estimates they are often very rough, the data for some of them being so poor that the estimates are liable to as much as 25 to 50 per cent error. It is believed, however, that estimates of this character are better than none at all, and serve the purpose of indicating in a relative way the proportionate amount of flow during the frozen period. These estimates are, as a rule, included in the annual discharge. The large error of the individual months has a relatively small effect on the annual total, and it is for many purposes desirable to have the yearly discharge computed even though some error is involved in doing so.

Accuracy and Reliability of Field Data and Comparative Results:

Practically all discharge measurements made under fair conditions are well within 5 per cent of the true discharge at the time of observation. Inasmuch as the errors of meter measurements are largely compensating, the mean rating curve, when well defined, is much more accurate than the individual measurements. Numerous tests and experiments have been made to test the accuracy of current-meter work. These show that it compares very favorably with the results from standard weirs, and, owing to simplicity of methods, usually gives results that are much more reliable than those from stations at dams, where uncertainty regarding the coefficient and complicated conditions of flow prevail.

The work, of course, is dependent on the reliability of the observers. With relatively few exceptions, the observers perform their work honestly. Care is taken, however, to watch them closely and to inquire into any discrepancies. It is, of course, obvious that one gage reading a day does not always give the mean height for that day. As an almost invariable rule, however, errors from this source are compensating and virtually negligible in a period of one month, although a single day's reading may, when taken by itself, be considerably in error.

In order to give engineers and others information regarding the probable accuracy of the computed results, footnotes are added to the tables of daily discharge and an accuracy column is inserted in the monthly discharge table. In the rating tables, "well defined" indicates in general that the rating is probably accurate within 5 per cent; "fairly well defined" within 10 per cent; "poorly defined" or "approximate," within 15 to 25 per cent. These notes are very general and are based on the plotting of the individual measurements with reference to the mean rating curve.

The accuracy column in the monthly-discharge table does not apply to the maximum or minimum nor to any individual day, but to the monthly mean. It is based on the accuracy of the rating, the probable reliability of the observer, and knowledge of local conditions. In this column, A indicates that the mean monthly flow is probably accurate within 5 per cent; B, within 10 per cent; C, within 15 per cent; D, within 25 per cent. Special conditions are covered by footnotes.

Use of the Data:

It is the policy of the Internal Improvement Commission to make available for the public the base data which have been collected in the field by the Survey engineers, and these data will also be published in the Water Supply papers of the United States Geological Survey from time to time. This is done for the purpose of giving to any engineer the opportunity of examining the computed results and of changing and adjusting them as may seem best to him. Although it is believed that the rating tables and computed monthly discharges are as good as the base data up to and including the current year will warrant, it should always be borne in mind that the additional data collected at each station from year to year nearly always throw new light on data already collected and published, and hence allow more or less improvement in the computed results of earlier years. It is, therefore, expected that the engineer who makes serious use of the data given in these papers will verify all ratings and make such adjustments in earlier years as may seem necessary.

The values in the table of monthly discharge are so arranged as to give only a general idea of the conditions of flow at the station, and it is not expected that they will be used for other than preliminary estimates. This is particularly true of the maximum and minimum figure, which, in the very nature of the method of collecting these data, are liable to large errors. The maximum value should be increased considerably for many stations in considering designs for spillways, and the minimum value should be considered for a group of, say, seven days and not for one day.

The rating table, provided the engineer accepts it, is published primarily to allow him to apply it directly to the daily gage heights and rearrange the daily discharges in order of magnitude or by some other method. The precipitation and temperature tables in the appendix of climatological data are self explanatory.

Coöperation and Acknowledgments:

As has been before stated, the data in this report were collected by the Water Resources Branch of the United States Geological Survey. The Internal Improvement Commission paid the expenses of collecting the field data and of preparing the same for the final studies and computations necessary before the data were ready for publication. Under this plan of coöperation the Commission was able to avail itself of the

organization and equipment of the Survey and the results of the investigations made available to both the State and federal governments. The climatological data are published with the permission of Willis L. Moore, Chief of the Weather Bureau of the United States Department of Agriculture.

Division of Work:

The field data were collected under the direction of A. H. Horton, District Engineer, by R. J. Taylor, William M. O'Neill, H. J. Jackson and C. T. Bailey, Junior Engineers.

The ratings and studies of the data, so far as completed, were made by A. H. Horton, H. J. Jackson and F. F. Henshaw. The computations and the preparations of the completed data for publication were made under the direction of F. F. Henshaw, Assistant Engineer, and G. C. Stevens, Junior engineer.

The climatological data were collected by the Climatological Division of the Weather Bureau of the United States Department of Agriculture, Willis L. Moore, Chief of the Bureau, and William G. Burns, Director of the Illinois Section. The report was edited and published under the direction of Robert Isham Randolph, Secretary of the Internal Improvement Commission.

BIG MUDDY RIVER.

Description.

The drainage basin of the Big Muddy river lies in southern Illinois. The river rises in the northwestern part of Jefferson county, flows south to the town of Zeigler, in Franklin county, thence it flows westward to Murphysboro, in Jackson county, from there it flows south and empties into the Mississippi river about forty miles above Cairo, Ill. Below Zeigler the river is extremely crooked. The length of the river is about 100 miles, not including bends. The important tributaries are Beaucoup creek, Little Muddy river, Caseys creek and Middle Fork creek; all these tributaries are small and of not much importance. The total drainage area is 2,320 square miles.

The drainage basin is elliptical in shape with a major axis about seventy miles long and a minor axis about fifty miles long. The country is level or undulating; the soil is known as "mulatto soil," a yellowish-brown clay. Winter wheat is the staple crop. The southeastern part is underlaid with valuable coal veins and coal mining is carried on quite extensively. The slope of the river is small; its sources are about 710 feet, and its mouth is about 310 feet above sea level. The banks and bed of the stream are soft and insecure.

There are no forested areas in this basin except occasional groves and the growth along the banks of the stream.

The mean annual rainfall is about forty-two inches. The winter conditions are mild; ice does not form very thick, and, as a rule, the snowfall is light and does not last long.

Storage possibilities have not been investigated, but, owing to the growing demand for water in this section, they should receive careful attention.

There are no opportunities for power development in this basin. The stream is similar to the other rivers in central and southern Illinois in that it is subject to high floods and very low water. In some localities the high water overflows the land on each bank for two or three miles; some sections resemble a lake during floods. At Murphysboro, said to be sixty miles from the Mississippi following the river, there is frequently backwater, and floods reach the height of thirty feet above low water. There is a possibility of constructing a canal from the Mississippi to the coal fields that lie along the Big Muddy. It is thought that only one lock would be necessary. Canal construction would probably be very simple, as the country is low and the material to be excavated very soft.

The following gaging stations are being maintained in this basin:
Big Muddy river at Cambon, 1908, 1909, 1910.
Beaucoup creek near Pinckneyville, 1908, 1909, 1910.

Big Muddy River near Cambon, Ill.

This station is located at the C., B. & Q. Railroad bridge, about one mile north of Cambon railroad station and about one and one-half miles east of Plumfield, Ill. It was established June 16, 1908, for obtaining data for use in studying the problems of drainage, flood control and navigation, also to obtain general statistical and comparative data.

The middle fork of the Big Muddy is tributary on the left bank about one-fourth mile above the station; the drainage area above the section is about 735 square miles.

The datum of the gage has not been changed; the records are reliable and accurate.

Big Muddy River.

Discharge Measurements of Big Muddy River at Cambon, Ill.

1908 to 1910

Date.	Hydrographer.	Width—Feet.	Area of section Sq. ft.	Mean velocity Ft. per sec.	Gage height—Feet.	Discharge Sec.-ft.
1908						
June 15	R. J. Taylor.	41.5	53	0.37	2.7	19
1909						
February 18	R. J. Taylor	589	3226	0.94	16.58	3042
March 12	Wm. M. O'Neill.	641	8252	1.25	24.54	10333
March 27	Wm. M. O'Neill.	102	455	1.19	8.28	542
May 12	H. J. Jackson	95	455	1.20	8.27	548
November 13	H. J. Jackson	26	12	0.10	1.79	1
1910						
May 23	C. T. Bailey	75	274	1.13	6.52	311
May 24	C. T. Bailey	91	358	1.27	7.56	457
May 25	C. T. Bailey.	100	509	1.53	9.09	782
June 9	C. T. Bailey	41	31.1	0.61	2.39	19.3

Big Muddy River.

Daily Gage Height in Feet of Big Muddy River at Cambon, Ill., for 1908 to 1910.

1908.

Day.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	1.6	3.8	1.5	1.3	1.1	1.5
2	.....	1.6	3.0	1.5	1.3	1.1	1.5
3	.....	1.6	2.7	1.5	1.3	1.1	1.5
4	.....	1.6	2.4	1.5	1.3	1.1	1.5
5	.....	1.6	2.2	1.5	1.3	1.1	1.5
6	.....	1.6	2.5	1.5	1.3	1.1	1.5
7	.....	1.6	3.5	1.5	1.3	1.1	1.5
8	.....	1.6	3.2	1.5	1.3	1.1	1.5
9	.....	1.6	3.0	1.5	1.3	1.1	1.5
10	.....	1.6	3.8	1.5	1.3	1.3	1.5
11	.....	1.6	3.5	1.5	1.3	1.3	1.5
12	.....	1.6	3.5	1.4	1.3	1.3	1.5
13	.....	1.6	2.7	1.4	1.3	1.3	1.5
14	.....	1.6	2.7	1.4	1.3	1.3	1.5
15	.....	1.6	2.3	1.4	1.3	1.3	1.5
16	2.5	1.6	2.1	1.4	1.3	1.3	1.5
17	2.3	1.6	1.9	1.4	1.3	1.3	1.5
18	2.2	1.6	1.9	1.4	1.3	1.3	1.5
19	2.1	1.6	1.8	1.4	1.3	1.3	1.5
20	2.0	1.6	1.8	1.4	1.2	1.3	1.5
21	2.0	1.6	1.7	1.4	1.2	1.3	1.5
22	1.9	1.6	1.7	1.4	1.2	1.3	1.5
23	1.9	4.1	1.6	1.4	1.2	1.3	1.5
24	1.8	2.8	1.6	1.4	1.2	1.5	1.5
25	1.8	2.1	1.6	1.4	1.2	1.5	1.5
26	1.7	1.9	1.6	1.4	1.2	1.5	1.5
27	1.7	1.8	1.6	1.4	1.2	1.5	1.5
28	1.6	1.7	1.6	1.4	1.1	1.5	1.5
29	1.6	1.6	1.5	1.4	1.1	1.5	1.5
30	1.6	4.7	1.5	1.4	1.1	1.5	1.5
31	.....	4.9	1.5	.....	1.1	.....	1.5

Big Muddy River.

Daily Gage Height in Feet of Big Muddy River at Cambon, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.5	2.6	16.8	3.65	9.95	4.9	6.3	4.9	1.6	2.4	1.8	3.0
2	1.5	2.6	14.8	3.35	10.45	4.3	4.5	10.0	1.6	2.3	1.75	2.8
3	1.5	2.6	12.9	3.25	7.65	3.8	3.65	10.2	1.6	2.2	1.75	2.7
4	1.4	2.6	10.2	3.25	5.2	3.75	3.0	5.4	1.6	2.15	1.75	2.6
5	1.4	3.7	6.8	3.25	4.0	4.85	2.7	5.0	1.55	2.15	1.75	2.55
6	1.4	3.9	5.5	6.2	3.9	10.65	2.55	3.4	1.55	2.1	1.75	2.55
7	1.4	4.1	4.7	10.3	5.35	11.3	2.4	3.1	1.55	1.9	1.75	2.55
8	1.4	5.2	4.1	11.6	4.7	10.6	5.7	5.1	1.7	1.9	1.8	2.5
9	1.4	5.8	16.4	11.2	4.5	9.65	6.1	6.9	1.7	1.9	1.85	2.5
10	1.4	5.9	21.2	10.3	7.3	6.5	5.65	4.3	1.7	1.9	1.85	2.5
11	1.4	6.0	24.3	9.9	8.5	4.2	8.45	3.4	1.65	1.85	1.85	3.2
12	1.4	6.1	24.7	7.1	7.4	3.5	13.95	3.3	1.65	1.85	1.85	7.3
13	1.4	6.7	23.8	13.9	6.7	5.3	15.4	3.3	1.65	1.85	1.85	10.4
14	1.4	11.7	21.9	14.95	5.05	9.2	18.95	3.15	1.65	1.8	1.9	12.5
15	1.4	14.2	20.6	16.45	4.2	10.6	20.55	3.05	1.65	1.8	3.5	13.25
16	1.4	14.5	18.75	17.45	4.2	11.2	20.4	3.65	2.2	1.75	4.8	13.55
17	1.5	15.9	16.9	18.4	4.2	10.1	19.75	2.4	2.1	1.7	4.5	13.65
18	1.5	16.0	12.7	17.1	4.1	6.85	18.7	2.3	2.05	1.7	6.1	13.4
19	1.5	16.4	10.5	16.3	3.6	3.8	16.7	2.2	2.0	1.7	6.8	9.5
20	1.5	16.2	9.7	17.4	3.2	3.2	12.1	2.0	2.0	1.7	6.1	6.2
21	1.5	15.2	8.2	18.95	2.9	2.9	8.25	1.8	1.95	1.7	5.6	5.4
22	1.7	15.3	7.75	20.05	2.7	2.8	5.15	1.75	2.45	1.7	5.1	4.55
23	2.5	16.4	6.45	20.15	2.5	2.65	3.9	1.75	5.6	1.7	6.7	3.75
24	4.1	18.7	4.9	20.25	2.5	2.45	3.05	1.7	8.05	1.7	7.0	3.2
25	3.9	20.5	6.85	20.2	2.45	4.8	2.7	1.7	7.95	1.75	8.7	2.9
26	3.6	21.0	8.75	18.25	3.4	7.55	2.5	1.7	5.6	1.8	7.6	2.8
27	3.3	20.5	7.9	17.05	5.5	8.2	3.4	1.7	4.2	1.8	5.5	2.7
28	3.2	18.9	6.2	14.5	8.5	6.95	3.6	1.7	3.4	1.8	5.5	2.6
29	3.2	.....	5.7	8.9	9.95	7.35	3.2	1.7	3.0	1.8	4.8	2.55
30	3.1	.....	4.5	9.85	8.75	6.5	2.9	1.65	2.7	1.8	3.35	2.5
31	2.6	.....	4.0	.....	6.6	.....	2.7	1.65	.....	1.8	.....	2.45

Gage heights Dec. 8-10, Dec. 25-31 were affected by ice conditions.

Big Muddy River.

Daily Gage Height in Feet of Big Muddy River at Cambon, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	April.	May.	June.
1	2.45	4.2	18.95	2.25	5.15	2.8
2	2.7	3.9	21.35	2.25	5.35	2.3
3	3.2	3.75	22.35	2.15	3.9	2.3
4	4.0	3.7	22.15	2.2	5.45	2.25
5	4.5	3.65	21.25	2.25	5.85	2.25
6	6.25	4.0	19.9	2.3	6.55	2.3
7	7.65	4.8	18.2	2.3	5.55	2.4
8	.....	4.35	17.4	2.35	4.95	2.35
9	.....	4.2	15.3	2.55	5.25	2.35
10	.....	3.05	10.5	2.6	5.7	2.4
11	4.2	3.7	6.15	2.45	6.05	2.5
12	5.6	3.6	4.8	2.4	6.45	2.2
13	7.0	3.35	4.1	2.35	6.15	2.15
14	8.3	3.4	3.75	4.25	4.1	2.15
15	12.25	3.65	3.4	3.9	4.2	2.15
16	13.7	3.75	3.25	4.55	3.85	2.1
17	14.1	3.95	3.2	7.85	3.6	2.1
18	14.9	4.4	3.05	10.15	3.3	2.1
19	15.0	4.75	2.95	8.9	3.05	2.5
20	14.9	4.8	2.9	7.7	2.9	2.0
21	14.8	.....	2.75	6.0	2.7	2.0
22	14.7	.....	2.8	5.1	2.55	2.0
23	14.05	9.1	2.65	4.25	4.75	1.95
24	13.9	10.9	2.6	3.8	6.3	1.95
25	9.9	11.65	2.65	3.8	8.6	1.95
26	6.55	10.6	2.55	4.15	9.3	1.9
27	5.7	14.75	2.55	6.55	7.9	1.9
28	5.05	16.4	2.5	8.05	4.7	5.3
29	5.0	.....	2.45	7.7	3.9	3.2
30	5.0	.....	2.35	6.15	3.4	5.9
31	4.65	.....	2.35	.....	3.1	.....

Gage heights Jan. 1, 8, 9 and 10, Feb. 16 and 22 were affected by ice conditions.
Gage heights Jan. 12, April 19 and 22 were obtained by interpolation.

Big Muddy River.

Daily Discharge of Big Muddy River at Cambon, Ill., for 1908 to 1910.

1908.

Day.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1		3	67	2	1	1	2
2		3	30	2	1	1	2
3		3	21	2	1	1	2
4		3	15	2	1	1	2
5		3	11	2	1	1	2
6		3	17	2	1	1	2
7		3	52	2	1	1	2
8		3	38	2	1	1	2
9		3	30	2	1	1	2
10		3	67	2	1	1	2
11		3	32	2	1	1	2
12		3	32	2	1	1	2
13		3	21	2	1	1	2
14		3	17	2	1	1	2
15		3	13	2	1	1	2
16	17	3	9	2	1	1	2
17	13	3	6	2	1	1	2
18	11	3	6	2	1	1	2
19	9	3	5	2	1	1	2
20	7	3	5	2	1	1	2
21	7	3	4	2	1	1	2
22	6	3	4	2	1	1	2
23	6	84	3	2	1	1	2
24	5	21	3	2	1	2	2
25	5	9	3	2	1	2	2
26	4	6	3	2	1	2	2
27	4	5	3	2	1	2	2
28	3	4	3	2	1	2	2
29	3	3	2	2	1	2	2
30	3	124	2	2	1	2	2
31		110	2		1		2
Total.	103	465	366	60	31	37	62

Big Muddy River.

Daily Discharge of Big Muddy River at Cambon, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2	19	3180	60	851	140	286	140	3	15	5.	30
2	2	19	2200	44	950	96	110	860	3	13	4.5	24
3	2	19	1530	40	461	67	60	900	3	11	4.5	21
4	2	19	900	40	166	64	30	186	3	10	4.5	19
5	2	62	350	40	78	136	21	148	2.5	10	4.5	18
6	2	72	196	274	72	993	18	47	2.5	9	4.5	18
7	2	84	124	920	181	1140	15	34	2.5	6	4.5	18
8	2	166	84	1200	124	982	217	157	4	6	5	15
9	2	228	2950	1110	110	797	262	363	4	6	5.5	12
10	2	239	6710	920	415	311	212	96	4	6	5.5	10
11	2	250	9940	842	590	90	582	47	3.5	5.5	5.5	38
12	2	262	10400	389	428	52	1860	42	3.5	5.5	5.5	415
13	2	337	9420	1850	387	176	2450	42	3.5	5.5	5.5	940
14	2	1220	7420	2260	152	716	4700	36	3.5	5	6	1420
15	2	1960	6120	2980	90	982	6080	32	3.5	5	52	1640
16	2	2080	4490	3600	90	1110	5940	60	11	4.5	132	1730
17	2	2700	3240	4260	90	880	5360	15	9	4	110	1760
18	2	2750	1470	3360	84	356	4450	13	8	4	262	1680
19	2	2950	960	2900	57	67	3120	11	7	4	350	770
20	2	2850	806	3560	38	38	1310	7	7	4	262	274
21	2	2360	542	4700	27	27	550	5	6.5	4	206	186
22	4	2400	475	5620	21	24	162	4.5	16	4	157	114
23	17	2950	304	5720	17	20	72	4.5	206	4	337	64
24	84	4450	140	5800	17	16	32	4	617	4	376	38
25	72	6030	356	5760	16	132	21	4	503	4.5	626	25
26	57	6510	635	4160	47	448	17	4	206	5	454	20
27	42	6030	496	3330	196	542	47	4	90	5	196	15
28	38	4660	274	2080	590	370	57	4	47	5	196	10
29	38	.....	217	662	851	422	38	4	30	5	132	8
30	34	.....	110	833	635	311	27	3.5	21	5	44	5
31	19	.....	78	.....	324	.....	21	3.5	.....	5	.....	5
Total.	447	53676	76117	69314	8105	11505	38127	3281	1834	190.0	3962.5	11342

Year period, 277900; discharge, Dec. 8–10, Dec. 25–31 was estimated from the daily gage heights, climatological and other data.

Big Muddy River.

Daily Discharge of Big Muddy River at Cambon, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	10	90	4700	12	162	24
2	21	72	6860	12	181	13
3	38	64	7900	10	72	13
4	78	62	7690	11	191	12
5	110	60	6760	12	234	12
6	280	78	5490	13	318	13
7	461	132	4120	13	201	15
8	350	100	3560	14	144	14
9	240	90	2400	18	171	14
10	160	32	960	19	217	15
11	90	62	268	16	256	17
12	206	57	132	15	304	11
13	376	44	84	14	268	10
14	558	47	64	93	84	10
15	1350	60	47	72	90	10
16	1780	50	40	114	70	9
17	1920	50	38	489	57	9
18	2240	25	32	890	42	9
19	2280	40	28	662	32	17
20	2240	50	27	468	27	7
21	2200	80	22	250	21	7
22	2160	100	24	157	18	7
23	1900	698	20	93	128	6
24	1850	1050	19	67	286	6
25	842	1210	20	67	608	6
26	318	982	18	87	734	6
27	217	2180	18	318	496	6
28	152	2950	17	518	124	176
29	148	.....	16	468	72	38
30	148	.....	14	268	47	239
31	120	.....	14	.....	34	.....
Total.	24843	10515	51402	5260	5689	751

Discharges Jan. 1, Jan. 8-10, and Feb. 16-22 were estimated from gage heights when available, and climatological and other data.

Big Muddy River.

Rating Table for Big Muddy River at Cambon, Ill.

1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.00	0	6.80	350	12.60	1444	18.40	4260
1.10	1	6.90	363	12.70	1472	18.50	4340
1.20	1	7.00	376	12.80	1500	18.60	4420
1.30	1	7.10	389	12.90	1530	18.70	4450
1.40	2	7.20	402	13.00	1560	18.80	4580
1.50	2	7.30	415	13.10	1590	18.90	4660
1.60	3	7.40	428	13.20	1620	19.00	4740
1.70	4	7.50	441	13.30	1652	19.10	4820
1.80	5	7.60	454	13.40	1684	19.20	4900
1.90	6	7.70	468	13.50	1716	19.30	4980
2.00	7	7.80	482	13.60	1748	19.40	5060
2.10	9	7.90	496	13.70	1780	19.50	5140
2.20	11	8.00	510	13.80	1812	19.60	5220
2.30	13	8.10	526	13.90	1846	19.70	5310
2.40	15	8.20	542	14.00	1880	19.80	5400
2.50	17	8.30	558	14.10	1920	19.90	5490
2.60	19	8.40	574	14.20	1960	20.00	5580
2.70	21	8.50	590	14.30	2000	20.10	5670
2.80	24	8.60	608	14.40	2040	20.20	5760
2.90	27	8.70	626	14.50	2080	20.30	5850
3.00	30	8.80	644	14.60	2120	20.40	5940
3.10	34	8.90	662	14.70	2160	20.50	6030
3.20	38	9.00	680	14.80	2200	20.60	6120
3.30	42	9.10	698	14.90	2240	20.70	6210
3.40	47	9.20	716	15.00	2280	20.80	6310
3.50	52	9.30	734	15.10	2320	20.90	6410
3.60	57	9.40	752	15.20	2360	21.00	6510
3.70	62	9.50	770	15.30	2400	21.10	6610
3.80	67	9.60	788	15.40	2450	21.20	6710
3.90	72	9.70	806	15.50	2500	21.30	6810
4.00	78	9.80	824	15.60	2550	21.40	6910
4.10	84	9.90	842	15.70	2600	21.50	7010
4.20	90	10.00	860	15.80	2650	21.60	7110
4.30	96	10.10	880	15.90	2700	21.70	7215
4.40	103	10.20	900	16.00	2750	21.80	7320
4.50	110	10.30	920	16.10	2800	21.90	7425
4.60	117	10.40	940	16.20	2850	22.00	7530
4.70	124	10.50	960	16.30	2900	22.10	7635
4.80	132	10.60	982	16.40	2950	22.20	7740
4.90	140	10.70	1004	16.50	3000	22.30	7845
5.00	148	10.80	1026	16.60	3060	22.40	7950
5.10	157	10.90	1048	16.70	3120	22.50	8055
5.20	166	11.00	1070	16.80	3180	22.60	8160
5.30	176	11.10	1092	16.90	3240	22.70	8265
5.40	186	11.20	1114	17.00	3300	22.80	8370
5.50	196	11.30	1136	17.10	3360	22.90	8475
5.60	206	11.40	1158	17.20	3420	23.00	8580
5.70	217	11.50	1180	17.30	3490	23.10	8685
5.80	228	11.60	1202	17.40	3560	23.20	8790
5.90	239	11.70	1224	17.50	3630	23.30	8895
6.00	250	11.80	1246	17.60	3700	23.40	9000
6.10	262	11.90	1268	17.70	3770	23.50	9105
6.20	274	12.00	1290	17.80	3840	23.60	9210
6.30	286	12.10	1314	17.90	3910	23.70	9315
6.40	298	12.20	1338	18.00	3980	23.80	9420
6.50	311	12.30	1364	18.10	4050	23.90	9525
6.60	324	12.40	1390	18.20	4120	24.00	9630
6.70	337	12.50	1416	18.30	4190	25.00	10680

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 10 discharge measurements made during 1908-1910 and is fairly well defined. Above gage height 22.0 feet the rating curve is a tangent, the difference being 105 per tenth.

Big Muddy River.

Monthly Discharge of Big Muddy River near Cambon, Ill., for 1908 and 1909.

(Drainage area 735 square miles.)

Month.	Discharge in Second-Feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908.						
June 16-30	17	3	6.87	.0093	.005	B
July	140	3	15.0	.020	.02	B
August	67	2	18.3	.025	.03	B
September	2	2	2.0	.0027	.003	C
October	1	1	1.0	.0014	.002	C
November	2	1	1.2	.0016	.002	C
December	2	2	2.0	.0027	.003	C
1909.						
January	84	2	14.4	.020	.02	C
February	6,510	19	1920	2.61	2.72	B
March	10,400	78	2460	3.35	3.86	B
April	5,800	40	2310	3.14	3.50	B
May	950	16	261	.355	.41	B
June	1,140	16	384	.522	.58	B
July	6,080	15	1230	1.67	1.92	B
August	900	3.5	106	.144	.17	B
September	617	2.5	61.1	.083	.09	B
October	15	4	6.13	.0083	.01	C
November	626	4.5	132	.180	.20	B
December	1,760	.....	366	.498	.57	C
The year	10,400	.....	771	1.05	14.05	.....
1910.						
January	2,280	.....	801	1.09	1.26	B
February	2,950	.....	376	.511	.53	B
March	7,900	14	1660	2.26	2.61	B
April	890	10	175	.248	.27	B
May	734	18	181	.250	.29	B
June	239	6	25.0	.034	.04	B

Beaucoup Creek near Pinckneyville, Ill.

This station is located at the I. C. Railroad bridge, about one and one-half miles east of Pinckneyville, Ill. It was established June 17, 1908, for the purpose of obtaining data for use in studying drainage and flood control problems, and to obtain general statistical and comparative data.

Little Beaucoup creek is tributary on the left bank below the gaging station, and Galum creek is tributary on the right bank about ten miles below the station. The drainage area above the section is about 227 square miles.

The datum of the gage has remained unchanged since its installation. The records for 1908 were taken whenever the gage reader happened to be in the vicinity of the gage. Except in a few cases, fairly accurate results will be obtained if the missing gage heights are interpolated.

The flood of 1902 reached a height of about 27.5 feet on the present gage. The creek goes dry at times; the water then stands in pools near the gage.

Big Muddy River.

Discharge Measurements of Beaucoup Creek at Pinckneyville, Ill., 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
June 17	R. J. Taylor	53	48	0.26	2.3	12
1909						
February 21	R. J. Taylor	130	916	0.66	9.67	602
March 13	Wm. M. O'Neill	87	289	0.26	3.97	76
March 26	Wm. M. O'Neill	130	862	0.58	8.95	502
March 26	Wm. M. O'Neill	128	692	0.65	7.87	449
March 27	Wm. M. O'Neill	106	396	0.43	5.25	170
May 11	H. J. Jackson	128	652	0.47	7.42	304
May 11	H. J. Jackson	107	477	0.45	5.93	217
November 3	H. J. Jackson	66	67	0.0	*1.73	0
1910						
May 22	C. F. Bailey	65	74.9	0.12	2.41	9.2
May 24	C. F. Bailey	122	538	0.69	7.24	373
May 25	C. F. Bailey	104	309	0.47	5.28	147

* Discharge estimated as 0.3 cu. ft. per sec. at riffle about 200 yards above section.

Big Muddy River.

Daily Gage Height in Feet of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	.....	.....	3.4	.....	.....	.....	.....	2.0
2	.....	.....	.....	.....	.....	.....	.....	.....	1.6	.....	.....	.....
3	.....	.....	.....	.....	.....	.....	2.3	1.9	.....	1.2	.....	.....
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	.....	.....	.....	.....	.....	.....	.....	.....	1.6	.....	1.0	1.9
6	.....	.....	.....	.....	.....	.....	.....	2.9	.....	.....	.....	.....
7	.....	.....	.....	.....	.....	.....	.....	6.0	.....	.....	.....	.....
8	.....	.....	.....	.....	.....	.....	2.2	.....	1.6	.....	.....	.....
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.2	.....	.....
11	.....	.....	.....	.....	.....	.....	2.0	2.3	.....	.....	1.0	.....
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.8
13	.....	.....	.....	.....	.....	.....	.....	.....	1.6	.....	.....	.....
14	.....	.....	.....	.....	.....	.....	1.9	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	2.0	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.7
17	.....	.....	.....	.....	.....	2.3	.....	.....	.....	1.0	.....	.....
18	.....	.....	.....	.....	.....	.....	1.8	1.8	.....	.....	.....	.....
19	.....	.....	.....	.....	.....	2.0	1.85	.....	1.5	.....	.....	1.7
20	.....	.....	.....	.....	.....	2.0	.....	.....	.....	.....	.....	.....
21	.....	.....	.....	.....	.....	.....	1.8	.....	.....	1.0	.....	1.7
22	.....	.....	.....	.....	.....	.....	.....	1.4	1.3	.....	.....	.....
23	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.25	.....	.....
24	.....	.....	.....	.....	.....	1.8	.....	.....	.....	.....	.....	.....
25	.....	.....	.....	.....	.....	1.8	2.9	1.7	.....	.....	.....	.....
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6
27	.....	.....	.....	.....	.....	.....	3.5	.....	1.2	.....	1.0	.....
28	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.0	.....	.....
29	.....	.....	.....	.....	.....	1.8	2.8	1.7	.....	.....	.....	1.6
30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov	Dec.
1	1.8	2.5	3.9	2.8	2.8	4.5	3.5	5.2	1.6	1.8	1.7	2.4
2	.....	.....	.....	2.85	2.75	3.1	2.2	3.1	1.6	1.8	1.7	2.3
3	.....	.....	3.7	2.75	2.7	2.7	2.1	2.15	1.6	1.8	1.75	2.3
4	1.8	2.5	3.1	2.7	2.6	3.7	2.0	2.3	1.6	1.8	1.7	2.2
5	.....	.....	.....	3.2	2.55	5.0	1.95	2.2	1.6	1.75	1.7	2.25
6	.....	3.3	2.7	8.9	2.75	4.5	1.9	2.1	1.6	1.7	1.7	2.3
7	.....	.....	.....	12.8	3.9	3.8	1.9	2.75	1.75	1.7	1.7	2.3

Big Muddy River.

Daily Gage Height in Feet of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
8	.....	4.1	.....	12.75	4.6	2.9	7.4	2.65	1.7	1.65	1.7	2.5
9	1.8	.....	20.85	4.6	7.8	2.5	12.0	2.55	1.75	1.65	1.6	2.5
10	.....	.....	20.7	3.75	12.6	2.1	5.4	2.2	1.85	1.65	1.8	2.6
11	1.8	3.3	17.3	2.7	5.9	2.0	14.5	2.1	1.8	1.65	1.9	3.1
12	.....	.....	.....	2.6	4.4	2.0	15.85	2.0	1.75	1.65	1.95	8.2
13	.....	3.4	4.0	16.0	4.1	1.95	18.8	1.9	1.7	1.6	1.9	13.25
14	.....	.....	.....	19.7	3.4	1.9	16.0	1.85	1.7	1.6	3.75	11.35
15	.....	14.1	3.1	11.3	4.3	1.9	6.7	1.8	1.7	1.6	3.9	6.85
16	1.7	12.0	3.1	7.5	5.0	1.9	4.1	1.8	1.65	1.6	3.3	5.6
17	.....	5.1	2.8	5.2	4.5	1.9	2.75	1.75	1.65	1.6	3.2	4.55
18	.....	4.5	2.7	4.9	4.1	1.85	2.5	1.75	1.6	2.0	4.2	3.45
19	.....	.....	2.7	9.1	2.6	1.8	2.45	1.7	1.6	1.95	3.9	3.2
20	.....	13.6	2.9	12.8	2.5	1.8	2.2	1.7	1.55	1.85	2.9	3.1
21	1.7	9.67	3.55	19.2	2.4	1.75	2.1	1.6	1.95	1.85	2.55	2.75
22	.....	.....	3.6	17.9	2.3	1.7	2.5	1.6	2.5	2.0	2.5	2.35
23	2.3	9.1	3.7	14.1	2.2	1.7	2.0	1.65	4.3	1.95	3.55	2.2
24	.....	16.6	3.85	10.3	2.1	1.7	1.9	1.7	5.2	1.9	9.2	2.1
25	.....	16.4	6.6	8.1	2.1	1.7	1.9	1.65	5.0	1.85	4.4	2.15
26	2.3	4.9	9.9	6.3	.....	1.7	2.1	1.65	3.1	1.85	3.2	2.2
27	.....	4.1	5.25	5.4	4.3	3.0	2.55	1.65	2.2	1.8	2.75	2.2
28	.....	.....	.....	4.0	3.4	2.95	5.0	1.65	2.1	1.8	2.55	2.15
29	2.2	.....	3.1	3.1	2.5	2.5	3.75	1.6	2.0	1.75	2.5	2.1
30	.....	.....	3.0	2.9	3.6	4.9	2.7	1.6	1.95	1.75	2.5	2.1
31	.....	.....	2.1	.....	4.9	.....	3.45	1.6	.....	1.7	.....	2.1

Gage heights Dec. 29-31 were affected by ice conditions.

Big Muddy River.

Daily Gage Height in Feet of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.1	2.85	19.85	2.15	2.9	2.1	.....	.....	.....	.....	.....	.....
2	2.4	2.7	17.25	2.2	2.8	2.1	.....	.....	.....	.....	.....	.....
3	2.55	2.8	15.9	2.15	4.0	2.05	.....	.....	.....	.....	.....	.....
4	4.2	2.95	9.45	2.2	8.15	2.0	.....	.....	.....	.....	.....	.....
5	3.8	3.0	6.2	2.25	5.1	2.05	.....	.....	.....	.....	.....	.....
6	4.0	3.1	5.45	2.95	3.75	2.1	.....	.....	.....	.....	.....	.....
7	5.4	3.0	4.4	2.3	3.85	2.05	.....	.....	.....	.....	.....	.....
8	4.2	3.05	3.85	2.2	4.7	2.0	.....	.....	.....	.....	.....	.....
9	3.8	2.8	3.45	2.4	5.55	2.25	.....	.....	.....	.....	.....	.....
10	2.4	2.75	3.3	2.3	4.2	2.4	.....	.....	.....	.....	.....	.....
11	2.5	2.7	3.1	2.25	3.55	2.25	.....	.....	.....	.....	.....	.....
12	2.35	2.6	2.95	2.6	3.6	2.15	.....	.....	.....	.....	.....	.....
13	7.55	2.75	2.95	2.35	3.55	2.1	.....	.....	.....	.....	.....	.....
14	13.2	2.9	2.8	2.95	3.25	2.1	.....	.....	.....	.....	.....	.....
15	14.8	3.0	2.8	2.9	3.05	2.1	.....	.....	.....	.....	.....	.....
16	10.3	3.05	2.65	3.15	2.7	2.1	.....	.....	.....	.....	.....	.....
17	5.55	3.15	2.6	4.2	3.0	2.05	.....	.....	.....	.....	.....	.....
18	8.0	3.35	2.55	5.25	2.45	2.0	.....	.....	.....	.....	.....	.....
19	14.05	3.4	2.55	4.15	2.4	1.95	.....	.....	.....	.....	.....	.....
20	9.8	3.5	2.55	3.7	2.65	1.9	.....	.....	.....	.....	.....	.....
21	7.3	3.5	2.45	3.25	2.6	1.9	.....	.....	.....	.....	.....	.....
22	6.2	4.6	2.45	3.0	3.15	1.9	.....	.....	.....	.....	.....	.....
23	4.45	6.05	2.45	2.75	3.7	1.8	.....	.....	.....	.....	.....	.....
24	3.45	5.35	2.4	2.7	7.0	1.8	.....	.....	.....	.....	.....	.....
25	3.2	5.0	2.4	2.65	5.4	1.75	.....	.....	.....	.....	.....	.....
26	3.1	4.15	2.35	2.65	3.7	1.7	.....	.....	.....	.....	.....	.....
27	3.0	14.2	2.3	3.3	3.05	1.7	.....	.....	.....	.....	.....	.....
28	3.45	21.1	2.3	4.05	2.7	2.9	.....	.....	.....	.....	.....	.....
29	4.0	.....	2.25	3.85	2.45	2.2	.....	.....	.....	.....	.....	.....
30	3.6	.....	2.25	3.25	2.3	2.05	.....	.....	.....	.....	.....	.....
31	2.95	.....	2.2	.....	2.2	.....	.....	.....	.....	.....	.....	.....

Gage heights on Apr. 17-20, May 8-22 and June 5 and 26 were obtained by interpolation.

Big Muddy River.

Daily Discharge of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1							50					3.0
2									1			
3							8	3		0		
4												
5									1		0	3.0
6								28				
7								227				
8							6		1			
9												2.0
10										0		
11							3	8			0	
12												2.0
13									1			
14							3					
15								3				
16												2.0
17						8				0		
18						2	2	2				
19						3	2.5		1			2.0
20						3						
21							2			0	0	2.0
22								1	0			
23										0		
24						2						
25						2	28	2				
26												1.0
27							55		0		0	
28										0		
29						2	24	2				1.0
30												
31												1.0
Total						20	183.5	276	5	0	0	19.0

Big Muddy River.

Daily Discharge of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2	14	75	24	24	112	55	163	1	2	2	11
2	2	14	70	26	22	36	6	36	1	2	2	8
3	2	14	65	22	20	20	4	12	1	2	2	8
4	2	14	36	20	17	65	3	8	1	2	2	6
5	2	30	28	40	16	147	3	6	1	2	2	7
6	2	45	20	512	22	112	3	4	1	2	2	8
7	2	66	727	1010	75	70	3	22	2	2	2	8
8	2	86	1430	1000	119	28	353	18	2	1.5	2	14
9	2	72	2140	119	393	14	900	16	2	1.5	1	14
10	2	59	2120	68	984	4	179	6	2.5	1.5	2	17
11	2	45	1640	20	219	3	1250	4	2	1.5	3	36
12	2	48	860	17	105	3	1440	3	2	1.5	3	435
13	2	50	80	1460	86	3	1850	3	2	1	3	1080
14	2	620	58	1980	50	3	1469	2.5	2	1	68	816
15	2	1190	36	809	98	3	290	2	2	1	75	304
16	2	900	36	363	147	3	86	2	1.5	1	45	195
17	2	155	24	163	112	3	22	2	1.5	1	40	116
18	2	112	20	140	86	2.5	11	2	1	3	92	52
19	2	616	20	534	17	2	12	2	1	3	75	40
20	2	1120	28	1010	14	2	6	2	1	2.5	28	56
21	2	600	58	1910	11	2	4	1	3	2.5	16	22
22	5	567	60	1730	8	2	14	1	14	3	11	10
23	8	534	65	1190	6	2	3	1.5	98	3	58	6
24	8	1540	72	679	4	2	3	2	163	3	545	4
25	8	1520	281	424	4	2	3	1.5	147	2.5	105	5
26	8	140	628	254	51	2	4	1.5	36	2.5	40	6
27	7	86	167	179	98	32	16	1.5	6	2	22	6
28	7	80	99	80	50	30	147	1.5	4	2	16	4
29	6	.....	36	36	14	14	68	1	3	2	14	3
30	9	.....	32	28	60	110	20	1	3	2	14	2
31	11	.....	4	.....	140	.....	52	1	.....	2	.....	2
Total.	119	10337	11015	15847	3072	863.5	8273	333.0	507.5	61.5	1295	3281

Year period, 55001.5. The discharge on those days on which the gage heights are missing and on those days when affected by ice conditions was obtained from studies of climatological and other data

Big Muddy River.

Daily Discharge of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4	26	2000	5	28	4						
2	11	20	1640	6	24	4						
3	16	24	1450	5	80	4						
4	92	30	574	6	430	3						
5	70	32	245	7	155	4						
6	80	36	183	30	68	4						
7	179	32	105	8	72	4						
8	92	34	72	6	126	3						
9	70	24	52	11	191	7						
10	11	22	45	8	92	11						
11	14	20	36	7	58	7						
12	10	17	30	17	60	5						
13	368	22	30	10	58	4						
14	1070	28	24	30	42	4						
15	1290	32	24	28	34	4						
16	679	34	18	38	20	4						
17	191	38	17	92	32	4						
18	413	48	16	167	12	3						
19	1190	50	16	89	11	3						
20	616	55	16	65	18	3						
21	344	55	12	42	17	3						
22	245	119	12	32	38	3						
23	108	232	12	22	65	2						
24	52	175	11	20	317	2						
25	40	147	11	18	179	2						
26	36	89	10	18	65	2						
27	32	1210	8	45	34	2						
28	52	2170	8	83	20	28						
29	80	.....	7	72	12	6						
30	60	.....	7	42	8	4						
31	30	.....	6	.....	6	.....						
Total.	7545	4821	6697	1029	2372	143						

Big Muddy River.

Rating Table for Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.00		5.80	211	10.60	718	15.40	1376
1.10		5.90	219	10.70	731	15.50	1390
1.20	0.0	6.00	227	10.80	744	15.60	1404
1.30	0	6.10	236	10.90	757	15.70	1418
1.40	1	6.20	245	11.00	770	15.80	1432
1.50	1	6.30	254	11.10	783	15.90	1446
1.60	1	6.40	263	11.20	796	16.00	1460
1.70	2	6.50	272	11.30	809	16.10	1474
1.80	2	6.60	281	11.40	822	16.20	1488
1.90	3	6.70	290	11.50	835	16.30	1502
2.00	3.0	6.80	299	11.60	848	16.40	1516
2.10	4	6.90	308	11.70	861	16.50	1530
2.20	6	7.00	317	11.80	874	16.60	1544
2.30	8	7.10	326	11.90	887	16.70	1558
2.40	11	7.20	335	12.00	900	16.80	1572
2.50	14	7.30	344	12.10	914	16.90	1586
2.60	17	7.40	353	12.20	928	17.00	1600
2.70	20	7.50	363	12.30	942	17.10	1614
2.80	24	7.60	373	12.40	956	17.20	1628
2.90	28	7.70	383	12.50	970	17.30	1642
3.00	32	7.80	393	12.60	984	17.40	1656
3.10	36	7.90	403	12.70	998	17.50	1670
3.20	40	8.00	413	12.80	1012	17.60	1684
3.30	45	8.10	424	12.90	1026	17.70	1698
3.40	50	8.20	435	13.00	1040	17.80	1712
3.50	55	8.30	446	13.10	1054	17.90	1726
3.60	60	8.40	457	13.20	1068	18.00	1740
3.70	65	8.50	468	13.30	1082	18.10	1754
3.80	70	8.60	479	13.40	1096	18.20	1768
3.90	75	8.70	490	13.50	1110	18.30	1782
4.00	80	8.80	501	13.60	1124	18.40	1796
4.10	86	8.90	512	13.70	1138	18.50	1810
4.20	92	9.00	523	13.80	1152	18.60	1824
4.30	98	9.10	534	13.90	1166	18.70	1838
4.40	105	9.20	545	14.00	1180	18.80	1852
4.50	112	9.30	556	14.10	1194	18.90	1866
4.60	119	9.40	568	14.20	1208	19.00	1880
4.70	126	9.50	580	14.30	1222	19.10	1894
4.80	133	9.60	592	14.40	1236	19.20	1908
4.90	140	9.70	604	14.50	1250	19.30	1922
5.00	147	9.80	616	14.60	1264	19.40	1936
5.10	155	9.90	628	14.70	1278	19.50	1950
5.20	163	10.00	640	14.80	1292	19.60	1964
5.30	171	10.10	653	14.90	1306	19.70	1978
5.40	179	10.20	666	15.00	1320	19.80	1992
5.50	187	10.30	679	15.10	1334	19.90	2006
5.60	195	10.40	692	15.20	1348	20.00	2020
5.70	203	10.50	705	15.30	1362		

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 12 discharge measurements made during 1908-1909. Above gage height 12.0 feet the rating curve is tangent, the difference being 11 per tenth.

Big Muddy River.

Monthly Discharge of Beaucoup Creek at Pinckneyville, Ill., for 1908 to 1910.

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
January						
February						
March						
April						
May						
June (5 days)			4.0	.018	.02	C
July (11 days)			16.7	.074	.08	B
August (9 days)			30.7	.135	.16	C
September (7 days)			0.7	.0031	.003	C
October (6 days)			.0	.0	.0	
November (4 days)			.0	.0	.0	
December (10 days)			1.9	.0084	.01	C
The year						
1909						
January			3.8	.017	.02	C
February	1540		369	1.63	1.69	C
March	2140	4	355	1.56	1.80	C
April	1580	17	528	2.33	2.60	C
May	984	4	99.1	.437	.50	B
June	147	2	28.8	.127	.14	B
July	1850	3	267	1.18	1.36	C
August	163	1	10.6	.047	.05	C
September	163	1	16.9	.074	.08	C
October	3	1	1.98	.0087	.01	C
November	545	1	43.2	.019	.02	C
December	1080		106	.467	.54	C
The year			154	.678	8.81	
1910						
January	1290	4	243	1.07	1.23	B
February	2170	17	172	.758	.79	C
March	2000	6	216	.952	1.10	C
April	167	5	34.3	.151	.17	B
May	430	6	75.5	.337	.39	B
June	28	2	4.8	.021	.02	C
July						
August						
September						
October						
November						
December						
The year						

EMBARRAS RIVER.

Description.

The drainage area of the Embarras river lies in the southeastern portion of the State of Illinois. The river rises in the central part of Champaign county, near Urbana, flows in a southerly direction through Douglas, Coles and Cumberland counties to the center of Jasper county, whence it flows in a general southeasterly direction diagonally across Jasper county, the southwestern corner of Crawford county and thence across Lawrence county to its junction with the Wabash river about midway between Vincennes, Ind., and St. Francisville, Ill. The river is extremely crooked, long tortuous bends being numerous; its length, exclusive of the bends, is about 125 miles. The most important tributary is Hickory creek or North Fork creek, which is tributary from the left bank about two and one-half miles below St. Marie, Ill. The total drainage area is about 2,410 square miles.

The drainage basin is long and narrow with a length of about 100 miles and a fairly uniform width ranging from 15 to 30 miles. The surrounding country is level or gently rolling, with some small hills along the river. The sources of the river are about 730 feet and the mouth about 100 feet above sea level. In the lower portion of the drainage basin in the vicinity of St. Marie the soil is sandy along the river, while to the north and west occurs the familiar black loam. To the east the soil is a light colored clay, which was formerly covered with a heavy growth of "water oak." There has been very little drainage done in the uplands, but the bottoms are drained to some extent.

There are extensive oil fields in the southwestern portion of the drainage basin west of Lawrenceville. In the upper portion of the drainage area, in the vicinity of Oakland, there is a sandy red soil near the river and black loam away from the river; one mile from the river on either side is prairie country. The chief crop in the drainage basin is corn, with some wheat. The overflow of the river does a large amount of damage and inundates large areas of bottom land throughout the entire length of the river.

There are no forested areas in this drainage basin. The mean annual rainfall is about forty inches. The conditions during the winter period are mild, as a rule, with snowfall extending over a period of about two months and lasting only a few days at a time. Ice in the river averages three or four inches for about a month. The storage possibilities have

not been investigated. There are no opportunities for water power. There are no springs and little or no ground-water storage to keep up the low water flow, and in consequence there is little flow in the river during periods of extreme drought. During wet seasons the ground becomes saturated and heavy rains are carried to the river much more rapidly than the stream can take care of and damaging floods result. Land drainage and flood control are subjects of considerable importance in this drainage area, and are being investigated at the present time.

Two gaging stations have been established and are being maintained in this drainage basin:

Embarras river near Oakland, Ill., 1909, 1910.
Embarras river at St. Marie, Ill., 1909, 1910.

Embarras River near Oakland, Ill.

This station is located at the highway bridge known as the "Antioch Bridge," about two miles northwest of Oakland, Ill., on the county-line road to Hindoboro and Arcola. It was established Oct. 23, 1909, for the purpose of obtaining data for use in studying water supply, drainage and flood control problems, and also to obtain general statistical and comparative data.

Brushy Fork creek is tributary from the left bank about five miles above the station. The total drainage area above the gaging station is 535 square miles.

The datum of the gage has remained unchanged since its installation: the data are accurate and reliable. There was no flow at this station during a portion of the summer of 1908. The flood of 1897 reached a height of about twenty-four feet by the present gage datum.

Embarras River.

Discharge Measurements of Embarras River near Oakland, Ill., 1909 and 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909						
October 22	H. J. Jackson	87	165	0.15	2 36	24
October 25	H. J. Jackson	90	237	0.32	3.20	76
December 8	H. J. Jackson	92	276	0.46	3.70	(a)126
1910						
March 8	M. C. McChristie	119	628	1.26	7 11	792
March 12	M. C. McChristie	105	426	1.03	5.44	440
March 12	M. C. McChristie	105	430	0.97	5.46	419
May 26	H. J. Jackson	160	894	1.38	9 02	1230

(a) 31 per cent of discharge under ice cover.

Embarras River.

Daily Gage Height in Feet of Embarras River near Oakland, Ill., for 1909 and 1910.

1909.

Day.	Oct	Nov.	Dec.
1		2.4	3.95
2		2.45	3.8
3		2.6	3.85
4		2.6	3.75
5		2.55	3.7
6		2.5	3.9
7		2.45	3.7
8		2.6	3.7
9		2.65	3.8
10		2.55	3.85
11		2.5	3.95
12		2.5	4.0
13		2.45	7.5
14		2.5	8.7
15		2.55	8.65
16		2.8	7.9
17		4.6	6.8
18		5.0	6.2
19		4.55	6.0
20		4.1	5.75
21		4.0	5.65
22		4.9	5.4
23	2.85	6.7	5.2
24	3.2	6.6	5.15
25	3.2	6.4	5.1
26	3.1	5.85	5.1
27	2.9	4.65	5.0
28	2.65	4.3	4.9
29	2.6	3.9	4.5
30	2.45	3.85	4.4
31	2.3		4.25

Gage heights Dec. 8-12, Dec. 21-31 were affected by ice conditions.

Embarras River.

Daily Gage Height in Feet of Embarras River near Oakland, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	4.7	4.7	13.0	3.35	4.75	5.1
2	4.9	4.8	12.5	3.45	5.0	4.8
3	5.85	5.1	10.5	3.35	5.25	4.6
4	5.9	5.0	10.0	3.3	6.2	4.5
5	5.8	4.95	9.2	3.25	5.65	4.4
6	5.85	4.9	8.4	3.2	5.45	4.3
7	5.6	4.65	7.3	3.15	5.25	4.1
8	5.4	4.6	6.9	3.2	5.2	4.0
9	5.0	4.5	6.1	3.25	6.95	3.9
10	4.6	4.45	5.8	3.25	6.8	3.8
11	4.4	4.2	5.55	3.25	6.8	3.75
12	5.2	4.0	5.4	3.3	7.7	3.5
13	10.55	4.0	5.2	3.35	7.7	3.4
14	14.15	3.95	5.15	3.4	7.6	3.35
15	15.0	3.95	4.9	3.45	7.3	3.3
16	13.5	3.9	4.8	3.5	6.25	3.2
17	11.2	3.85	4.7	3.9	5.8	3.1
18	12.5	3.85	4.5	4.05	5.15	3.0
19	13.5	3.9	4.3	4.0	5.0	2.8
20	12.4	3.8	4.25	4.0	4.8	2.75
21	10.45	3.9	4.2	3.9	4.45	2.7
22	9.0	4.1	4.15	3.9	4.2	2.55
23	7.6	4.2	4.1	3.9	7.9	2.55
24	6.2	3.9	4.0	3.9	9.1	2.5
25	6.0	4.1	3.95	3.95	9.5	2.4
26	5.8	4.2	3.95	4.2	8.55	2.3
27	5.6	5.0	3.9	4.2	7.1	3.5
28	5.3	9.0	3.85	4.2	6.1	4.7
29	5.1	.....	3.7	4.4	5.8	5.0
30	5.05	.....	3.55	4.5	5.6	5.1
31	4.8	.....	3.4	.....	5.5	.....

Gage heights Jan. 1-11, Feb. 17-21 were affected by ice conditions.

Embarras River.

Daily Discharge of Embarras River near Oakland, Ill., for 1909 and 1910.

1909.

Day.	Oct.	Nov.	Dec.
1	.....	27	158
2	.....	30	140
3	.....	37	146
4	.....	37	134
5	.....	34	128
6	.....	32	152
7	.....	30	128
8	.....	37	126
9	.....	40	160
10	.....	34	100
11	.....	32	120
12	.....	32	140
13	.....	30	878
14	.....	32	1190
15	.....	34	1170
16	.....	49	975
17	.....	260	715
18	.....	336	583
19	.....	252	540
20	.....	179	488
21	.....	165	
22	.....	316	
23	52	693	300
24	76	671	
25	76	627	
26	68	508	
27	55	269	
28	40	240	200
29	37	152	
30	30	146	
31	22	.....	.....
Total	156	5331	10,811

Discharge Dec. 8–12, Dec. 21-31 was estimated from the daily gage heights, climatological and other data.

Embarras River.

Daily Discharge of Embarras River near Oakland, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	300	278	2710	90	288	356
2	300	297	2500	100	336	297
3	300	356	1750	90	386	260
4	300	336	1580	85	583	243
5	300	326	1330	80	466	226
6	300	316	1100	76	426	210
7	300	269	830	72	386	179
8	200	260	737	76	376	165
9	200	243	561	80	748	152
10	200	234	498	80	715	140
11	200	194	446	80	715	134
12	376	165	416	85	926	105
13	1770	165	376	90	926	95
14	3200	158	366	95	902	90
15	3560	158	316	100	830	85
16	2920	152	297	105	594	76
17	2000	100	278	152	498	68
18	2500	100	243	172	366	61
19	2920	50	210	165	336	49
20	2460	40	202	165	297	46
21	1730	60	194	152	234	43
22	1270	179	186	152	194	34
23	902	194	179	152	975	34
24	583	152	165	152	1300	32
25	540	179	158	158	1420	27
26	498	194	158	194	1150	22
27	456	336	152	194	783	105
28	396	1270	146	194	561	278
29	356	.....	128	226	498	336
30	346	.....	110	243	456	356
31	297	.....	95	.....	436	.....
Total	31980	6761	18417	3855	19107	4304

Discharge Jan. 1-11, Feb. 17-21 was estimated from the gage readings and from climatological and other data.

Embarras River.

Rating Table for Embarras River near Oakland, Ill.

1909 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
2.00	..	5.30	396	8.60	1159	11.90	2262
2.10	..	5.40	416	8.70	1186	12.00	2300
2.20	..	5.50	436	8.80	1214	12.10	2340
2.30	22	5.60	456	8.90	1242	12.20	2380
2.40	27	5.70	477	9.00	1270	12.30	2420
2.50	32	5.80	498	9.10	1299	12.40	2461
2.60	37	5.90	519	9.20	1328	12.50	2502
2.70	43	6.00	540	9.30	1358	12.60	2543
2.80	49	6.10	561	9.40	1388	12.70	2584
2.90	55	6.20	583	9.50	1419	12.80	2626
3.00	61	6.30	605	9.60	1450	12.90	2668
3.10	68	6.40	627	9.70	1482	13.00	2710
3.20	76	6.50	649	9.80	1514	13.10	2752
3.30	85	6.60	671	9.90	1547	13.20	2794
3.40	95	6.70	693	10.00	1580	13.30	2836
3.50	105	6.80	715	10.10	1614	13.40	2878
3.60	116	6.90	737	10.20	1648	13.50	2920
3.70	128	7.00	760	10.30	1682	13.60	2963
3.80	140	7.10	783	10.40	1717	13.70	3006
3.90	152	7.20	806	10.50	1752	13.80	3049
4.00	165	7.30	830	10.60	1787	13.90	3092
4.10	179	7.40	854	10.70	1822	14.00	3135
4.20	194	7.50	878	10.80	1858	14.10	3178
4.30	210	7.60	902	10.90	1894	14.20	3221
4.40	226	7.70	926	11.00	1930	14.30	3264
4.50	243	7.80	950	11.10	1966	14.40	3307
4.60	260	7.90	975	11.20	2002	14.50	3350
4.70	278	8.00	1000	11.30	2039	14.60	3393
4.80	297	8.10	1026	11.40	2076	14.70	3436
4.90	316	8.20	1052	11.50	2113	14.80	3479
5.00	336	8.30	1078	11.60	2150	14.90	3522
5.10	356	8.40	1105	11.70	2187	15.00	3565
5.20	376	8.50	1132	11.80	2224		

NOTE.—The above table is not applicable for ice or obstructed channel conditions. It is based on 7 discharge measurements made during 1909 and 1910.

Embarras River.

Monthly Discharge of Embarras River near Oakland, Ill., 1909 and 1910.

(Drainage area 535 square miles.)

Month.	Discharge in Second feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile	Depth in inches.	Accuracy.
1909						
October 24-31	76	22	50.7	.095	.03	A
November	693	27	178	.333	.37	A
December	1190	.....	349	.652	.75	C
1910						
January	3560	.....	1030	1.93	2.22	C
February	1270	140	255	.477	.50	A
March	2710	95	594	1.11	1.28	B
April	243	72	128	.239	.27	A
May	1420	194	616	1.15	1.33	A
June	356	22	143	.267	.30	A

Embarras River near St. Marie, Ill.

This station is located at the highway bridge at the north end of Main street, St. Marie, Ill., about 150 yards downstream from the C., H. & D. Railroad bridge. It was established Oct. 20, 1909, for the purpose of obtaining data for use in studying problems of water supply, drainage, and flood control, and also to obtain general statistical and comparative data.

Hickory creek, or North Fork creek, is tributary from the left bank about two and one-half miles below the station.

The total drainage area above the gaging station is about 1,540 square miles.

The datum of the gage has remained unchanged since its installation; the data are accurate and reliable. The flood of the spring of 1908 reached a height of about 22.5 feet by the present gage datum.

Embarras River.

Discharge Measurements of Embarras River at St. Marie, Ill., for 1909 and 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909						
August 7	H. J. Jackson	97	634	0.39	*3.48	245
August 7	H. J. Jackson	111	432	0.55	3.44	236
October 20	H. J. Jackson	112	368	0.49	2.89	181
1910						
March 5	M. E. McChristie	174	2156	2.13	16.01	4604
April 8	H. J. Jackson	112	462	0.65	3.70	301
May 14	C. T. Bailey	122	1040	1.71	8.67	1780
May 15	C. T. Bailey	120	955	1.64	8.06	1570
May 16	C. T. Bailey	118	839	1.44	7.18	1210
May 17	C. T. Bailey	117	760	1.33	6.53	1010
May 17	C. T. Bailey	117	753	1.33	6.43	1000
May 18	C. T. Bailey	116	711	1.34	6.06	953

* Measurement not at regular section.

Embarras River.

Daily Gage Height in Feet of Embarras River at St. Marie, Ill., for 1909 and 1910.

1909.

Day.	Oct.	Nov.	Dec.
1	.....	2.2	4.0
2	.....	2.2	3.9
3	.....	2.3	3.7
4	.....	2.2	3.5
5	.....	2.2	3.5
6	.....	2.1	3.5
7	.....	2.15	3.7
8	.....	2.15	3.7
9	.....	2.15	3.5
10	.....	2.2	4.0
11	.....	2.2	4.0
12	.....	2.2	4.6
13	.....	2.2	12.0
14	.....	2.2	16.1
15	.....	2.3	15.9
16	.....	2.3	14.0
17	.....	2.7	11.1
18	.....	4.4	8.8
19	.....	3.5	7.5
20	2.9	3.0	6.5
21	2.85	3.7	5.4
22	2.45	3.5	5.4
23	2.25	5.8	5.4
24	3.1	10.0	.....
25	3.6	7.1	.....
26	2.9	6.2	.....
27	2.5	5.7	.....
28	2.4	5.1	.....
29	2.5	4.6	.....
30	2.4	4.4	4.5
31	2.3	.....	.....

Gage heights Dec. 8-11, Dec. 20-31 were affected by ice conditions.

Embarras River.

Daily Gage Height in Feet of Embarras River at St. Marie, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	.....	5.9	18.7	4.0	4.4	5.2
2	.....	5.5	18.3	4.1	4.3	5.6
3	.....	6.0	17.7	3.9	6.0	5.2
4	.....	6.8	17.2	3.9	13.2	5.0
5	.....	6.1	15.9	3.9	10.0	4.8
6	.....	5.7	14.2	3.9	7.1	4.7
7	.....	5.4	12.4	3.8	6.1	4.5
8	.....	5.0	10.5	3.7	7.1	4.3
9	.....	4.9	9.2	3.6	9.1	4.2
10	.....	4.9	8.4	3.5	8.1	4.1
11	.....	4.7	7.6	3.4	7.5	4.0
12	.....	4.5	7.1	3.4	11.1	3.7
13	7.2	4.3	6.7	3.3	11.4	3.5
14	14.0	5.5	6.4	3.3	8.8	3.6
15	16.0	5.0	6.1	3.3	7.9	3.6
16	16.0	5.0	5.8	6.2	7.0	3.2
17	15.1	4.7	5.5	10.3	6.5	3.2
18	15.3	4.9	5.4	9.1	6.0	3.1
19	15.9	4.9	5.2	6.7	5.7	3.1
20	17.4	4.9	5.1	6.3	5.4	3.0
21	17.1	5.2	5.0	5.4	5.2	2.9
22	15.3	6.5	4.9	5.5	5.1	2.8
23	12.9	7.4	4.7	4.9	7.5	2.9
24	10.3	7.1	4.6	4.8	12.0	2.7
25	8.7	6.5	4.5	4.5	9.3	2.6
26	7.8	5.6	4.5	4.3	8.9	2.9
27	7.5	15.7	4.3	4.8	8.2	4.0
28	7.4	18.1	4.2	4.9	9.1	4.3
29	6.9	.....	4.2	4.5	7.3	7.0
30	6.4	.....	4.1	4.4	7.2	5.4
31	6.1	.....	4.0	.....	5.9	.....

Gage heights Jan. 1-16 were affected by ice conditions.
Gage heights Jan. 13, 14, 15 and 16 are to top of ice.

Embarras River.

Daily Discharge of Embarras River at St. Marie, Ill., for 1909 and 1910.

1909.

Day.	Oct.	Nov.	Dec.
1	.....	113	367
2	.....	113	346
3	.....	119	306
4	.....	113	267
5	.....	113	267
6	.....	108	267
7	.....	110	306
8	.....	110	250
9	.....	110	250
10	.....	113	250
11	.....	113	250
12	.....	113	503
13	.....	113	3110
14	.....	113	4790
15	.....	119	4710
16	.....	119	3930
17	.....	153	2740
18	.....	457	1860
19	.....	267	1380
20	176	188	800
21	170	306	500
22	130	267	400
23	116	828	400
24	201	2310	400
25	286	1240	400
26	176	952	350
27	134	798	350
28	126	627	350
29	134	503	350
30	126	457	350
31	119	.....	350
.....	1894	11165	31149

Discharge Dec. 8-11, 20-31 was estimated from gage heights, climatological and other data.

Embarras River.

Daily Discharge of Embarras River at St. Marie, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	400	859	5860	367	457	654
2	400	739	5690	389	434	768
3	400	890	5450	346	890	654
4	500	1140	5240	346	3600	600
5	500	921	4710	346	2310	551
6	500	798	4010	346	1240	527
7	500	710	3270	326	921	480
8	500	600	2500	306	1240	434
9	400	575	2010	286	1970	411
10	400	575	1710	267	1600	389
11	400	527	1410	249	1380	367
12	800	480	1240	249	2740	306
13	1000	434	1110	232	2860	267
14	3500	739	1010	232	1860	286
15	4500	600	921	232	1520	286
16	4500	600	828	952	1200	216
17	4380	527	739	2430	1040	216
18	4460	575	710	1970	890	201
19	4710	575	654	1110	798	201
20	5320	575	627	983	710	188
21	5200	654	600	710	656	176
22	4460	1040	575	739	627	164
23	3480	1340	527	575	1380	176
24	2430	1240	503	551	3110	153
25	1820	1040	480	480	2040	143
26	1490	768	480	434	1890	176
27	1380	4630	434	551	1630	367
28	1340	5610	411	575	1970	434
29	1170	.....	411	480	1300	1200
30	1010	.....	389	457	1270	710
31	921	.....	367	.....	859	.....
Total	62771	29761	54876	17516	46390	11701

Discharge Jan. 1-16 was estimated from the gage readings and from climatological and other data.

Embarras River.

Rating Table for Embarras River at St. Marie, Ill., for 1909 and 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
2.00	103	6.30	983	10.60	2544	14.90	4299
2.10	108	6.40	1014	10.70	2583	15.00	4340
2.20	113	6.50	1045	10.80	2622	15.10	4381
2.30	119	6.60	1076	10.90	2661	15.20	4422
2.40	126	6.70	1107	11.00	2700	15.30	4463
2.50	134	6.80	1138	11.10	2741	15.40	4504
2.60	143	6.90	1169	11.20	2782	15.50	4545
2.70	153	7.00	1200	11.30	2823	15.60	4586
2.80	164	7.10	1235	11.40	2864	15.70	4627
2.90	176	7.20	1270	11.50	2905	15.80	4668
3.00	188	7.30	1305	11.60	2946	15.90	4709
3.10	201	7.40	1341	11.70	2987	16.00	4750
3.20	216	7.50	1377	11.80	3028	16.10	4791
3.30	232	7.60	1413	11.90	3069	16.20	4832
3.40	249	7.70	1449	12.00	3110	16.30	4873
3.50	267	7.80	1486	12.10	3151	16.40	4914
3.60	286	7.90	1523	12.20	3192	16.50	4955
3.70	306	8.00	1560	12.30	3233	16.60	4996
3.80	326	8.10	1597	12.40	3274	16.70	5037
3.90	346	8.20	1634	12.50	3315	16.80	5078
4.00	367	8.30	1671	12.60	3356	16.90	5119
4.10	389	8.40	1708	12.70	3397	17.00	5160
4.20	411	8.50	1745	12.80	3438	17.10	5201
4.30	434	8.60	1782	12.90	3479	17.20	5242
4.40	457	8.70	1819	13.00	3520	17.30	5283
4.50	480	8.80	1856	13.10	3561	17.40	5324
4.60	503	8.90	1893	13.20	3602	17.50	5365
4.70	527	9.00	1930	13.30	3643	17.60	5406
4.80	551	9.10	1968	13.40	3684	17.70	5447
4.90	575	9.20	2006	13.50	3725	17.80	5488
5.00	600	9.30	2044	13.60	3766	17.90	5529
5.10	627	9.40	2082	13.70	3807	18.00	5570
5.20	654	9.50	2120	13.80	3848	18.10	5611
5.30	682	9.60	2158	13.90	3889	18.20	5652
5.40	710	9.70	2196	14.00	3930	18.30	5693
5.50	739	9.80	2234	14.10	3971	18.40	5734
5.60	768	9.90	2272	14.20	4012	18.50	5775
5.70	798	10.00	2310	14.30	4053	18.60	5816
5.80	828	10.10	2349	14.40	4094	18.70	5857
5.90	859	10.20	2388	14.50	4135	18.80	5898
6.00	890	10.30	2427	14.60	4176	18.90	5939
6.10	921	10.40	2466	14.70	4217	19.00	5980
6.20	952	10.50	2505	14.80	4258		

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 11 discharge measurements made during 1909 and 1910. Above gage height 12 feet the rating curve is a tangent, the difference being 41 per tenth.

Embarras River.

Monthly Discharge of Embarras River at St. Marie, Ill., for 1909 and 1910.

(Drainage area 1,540 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1909						
October 20-31	286	116	158	0.103	.05	A
November	2310	108	372	.242	.27	A
December	.....	.....	1000	.649	.75	C
The year	.....	.....	.....	.....	.....	.....
1910						
January	.....	.....	2020	1.31	1.51	C
February	5610	434	1060	.688	.72	B
March	5860	367	1770	1.15	1.33	B
April	2430	232	584	.379	.42	A
May	3600	434	1500	.974	1.12	B
June	1200	143	390	.253	.28	A

KASKASKIA RIVER.

Description.

This river is also called the Okaw. The drainage area of this stream lies wholly within the State of Illinois. It rises in the center of Champaign county, flows in a southwestward direction and empties into the Mississippi river in Randolph county near the city of Chester, Ill. It is about 190 miles in length, not following the bends. The river is very crooked and its total length is not far from 400 miles. The total drainage area is 5,840 square miles. There are but few tributaries of any size; the most important are Shoal creek and Silver creek, which are tributary from the north at the lower part of the river.

The drainage basin is long and comparatively narrow, the average width is about thirty miles, maximum width about sixty miles. The ground is low, level or undulating, and in consequence the slope of the river is small. The sources of the river are about 740 feet and its mouth about 350 feet above sea level. The soil is mostly black loam. In the lower portion of the drainage area the soil gradually changes to a yellowish-brown clay. Within twenty miles above Shelbyville occurs the only rock of any extent along this stream. In this fifteen or twenty-mile section the banks and bed are largely of limestone or sandstone, elsewhere the banks and bed are mostly soft soil with some gravel.

There are no forested areas in this drainge basin; the annual rainfall is about forty inches. In general, the winter conditions are mild. Opportunities for storage have not been investigated to any extent, although it is a subject of considerable importance. There are no opportunities for water power development of any importance anywhere along the river. Owing to the lowness of the drainage area there is little opportunity for ground-water storage. During wet weather the ground-water plane rises to the surface of the ground and the rains run off into the streams very quickly, producing very sudden rises and floods. During dry weather, since there is little or no ground-water stored, the flow of the stream becomes very small and in some places dries up entirely. The banks of the river are low and in times of floods large areas are covered with water, delaying the planting of crops and sometimes destroying growing crops. Storage possibilities, land drainage and flood control are matters of considerable importance in this basin.

The following gaging stations have been established and maintained in this drainage basin:

Kaskaskia river near Arcola, 1908, 1909, 1910.
Kaskaskia at Shelbyville, 1908, 1909, 1910.
Kaskaskia at Vandalia, 1908, 1909, 1910.
Kaskaskia at Carlyle, 1908, 1909, 1910.
Kaskaskia at New Athens, 1909, 1910.
Shoal creek near Breese, 1909, 1910.
Silver creek near Lebanon, 1908, 1909, 1910.

Kaskaskia River near Arcola, Ill.

This station is located at the highway bridge known as the Bagdad bridge, about four miles west of Arcola, Ill. It was established April 11, 1908, for the purpose of obtaining data for use in studying drainage, flood protection, and storage problems, and also to obtain general statistical and comparative data.

Lake Fork is tributary from the west about three or four miles above the gaging station. The drainage area above the station is about 390 square miles.

The datum of the gage has remained unchanged since its installation, and the records are accurate and reliable.

The river at this point is said to go dry at times and was dry for about two months in 1908. The highwater of May, 1908, reached a height of 17.3 feet on the gage.,

Kaskaskia River.

Discharge Measurements of Kaskaskia River near Arcola, Ill.

1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
April 29	R. J. Taylor	226.5	1181	1.06	10.0	1254
July 24	R. J. Taylor	68.5	75	0.58	2.75	44
1909						
March 22	Wm. M. O'Neill	96	234	0.78	4.58	182
May 21	H. J. Jackson	103	308	0.81	5.32	248
November 23	H. J. Jackson	107	337	0.76	5.65	255
1910						
March 7	M. E. McChristie	205	734	0.86	7.78	635
March 10	M. E. McChristie	124	441	0.89	6.40	392
March 10	M. E. McChristie	124	442	0.90	6.37	396
May 13	H. J. Jackson	205	686	0.90	7.82	619
May 25	H. J. Jackson	228	1230	1.12	10.29	1380
May 27	H. J. Jackson	220	1020	0.95	9.43	965
May 28	H. J. Jackson	210	778	0.87	8.28	678

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

1908.

Day.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	8.7	5.8	3.1	2.6	0.9			
2	.....	8.2	5.7	3.0	*2.5	0.8			
3	.....	*8.1	5.5	3.0	2.4	0.8			
4	.....	8.0	5.7	3.4	2.2	0.8			
5	.....	12.0	5.6	*3.3	2.1	0.7			
6	.....	13.2	5.4	3.2	2.1	*0.6			
7	.....	16.2	*5.3	3.6	2.0	0.6			
8	.....	17.3	5.2	3.4	2.0	0.6			
9	.....	16.7	5.4	3.2	*2.0	0.6			
10	.....	*15.7	5.5	3.0	1.9	0.5			
11	8.5	14.7	5.4	2.9	1.9	0.5			
12	*8.1	13.5	5.3	*2.8	1.9	0.5			
13	7.7	12.9	5.2	2.7	1.8				
14	7.3	11.9	*5.0	2.7	1.8	D	D	D	D
15	7.0	11.6	4.8	2.6	1.8				
16	6.7	11.4	4.7	3.6	*1.7	R	R	R	R
17	6.3	*10.6	4.6	3.4	1.6				
18	6.1	9.7	4.4	3.4	1.6	Y	Y	Y	Y
19	*6.0	9.6	4.3	*3.4	1.6				
20	5.9	9.8	4.3	3.5	1.5				
21	5.6	10.0	*4.2	3.5	1.5				
22	5.4	9.7	4.1	3.4	1.5				
23	5.3	9.3	4.0	3.3	*1.4				
24	6.4	*9.0	3.9	3.0	1.3				
25	8.2	8.6	3.8	2.9	1.3				
26	*9.0	8.1	3.7	*2.8	1.2				
27	9.8	7.7	3.5	2.8	1.2				
28	9.9	7.3	*3.4	2.8	1.1				
29	10.0	7.0	3.3	2.7	1.0				
30	9.4	6.9	3.3	2.7	*1.0				
31	.....	6.8	.....	2.7	0.9				

* Gage height obtained by interpolation.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1		1.4	11.0	4.0	7.6	9.8	4.8	*3.75	2.7	1.7	3.6	4.8
2		1.4	10.9	4.0	*7.6	8.7	4.6	3.6	2.6	1.6	3.6	4.6
3		1.6	10.1	3.9	7.5	8.2	4.5	3.4	2.5	*1.6	3.4	4.5
4		2.0	9.8	*3.9	7.5	7.6	*4.7	4.3	2.3	1.6	3.2	4.2
5		3.6	9.4	3.9	7.4	8.6	*4.9	3.2	*2.25	1.6	3.1	*4.15
6		5.4	8.9	7.7	7.3	*8.4	5.1	3.1	*2.15	1.6	3.0	4.1
7		*5.6	*8.0	11.7	7.2	8.2	7.0	2.9	2.1	1.5	*2.95	4.1
8		5.7	7.1	11.4	7.1	7.5	8.4	*2.75	2.0	1.5	2.9	3.9
9	D	6.1	9.2	11.0	*8.2	7.2	9.2	2.6	1.9	1.5	2.9	3.9
10		6.4	8.6	10.8	9.4	7.8	9.4	2.5	1.8	*1.5	2.8	3.8
11	R	6.6	7.4	*10.6	10.0	7.4	*8.55	2.4	1.8	1.5	2.8	3.7
12		6.4	6.5	10.4	9.6	6.2	7.7	2.3	*1.75	1.4	2.8	*4.4
13	Y	6.0	6.1	13.2	8.9	*6.3	10.4	2.3	1.7	1.4	2.9	5.1
14		*6.2	*6.0	15.0	8.3	6.4	14.1	2.2	1.7	1.4	*3.75	6.2
15		6.5	6.0	14.1	7.5	6.0	15.4	*2.15	1.6	1.4	4.6	8.1
16		6.9	5.9	13.4	*7.0	5.5	15.7	2.1	1.6	1.4	4.9	8.3
17		7.1	5.8	12.2	6.5	5.4	13.2	2.1	1.6	*1.9	5.9	8.1
18		7.7	5.8	*11.8	6.1	5.2	*11.8	2.0	1.5	2.4	7.2	8.0
19		8.4	5.7	11.4	5.8	4.9	10.4	2.0	*1.45	2.6	7.1	*7.95
20		9.1	5.2	11.6	5.7	*4.8	9.2	1.9	1.4	2.6	6.9	7.9
21		*9.6	*5.1	11.9	5.3	4.8	8.0	1.9	1.4	2.5	*6.55	7.8
22		10.0	5.0	12.2	5.2	4.7	7.1	*1.8	1.9	2.5	6.2	7.8
23		10.0	4.9	12.4	*5.1	5.0	7.0	1.7	2.3	3.0	5.7	7.7
24		11.1	4.7	11.2	5.0	5.6	6.8	1.7	2.2	*3.5	5.8	7.6
25	0.8	14.4	4.5	*10.6	5.3	4.9	*6.45	1.6	2.1	4.0	5.6	7.5
26	0.8	13.6	4.5	10.1	6.1	4.7	6.1	1.9	*2.05	3.9	5.4	*7.35
27	0.9	12.2	4.4	9.4	8.0	*4.4	5.8	3.2	2.0	3.9	5.2	7.2
28	0.9	*11.6	*4.3	8.8	12.9	4.2	5.2	3.1	1.9	3.8	*5.15	7.2
29	1.0	.....	4.2	8.1	*12.0	4.2	4.5	*2.95	1.8	3.7	5.1	7.1
30	1.0	.....	4.1	7.8	11.1	4.0	4.1	2.8	1.7	3.7	5.0	7.0
31	*1.2	.....	4.0	.....	10.2	.....	3.9	2.8	.....	*3.65	.....	6.9

* The gage was not read on Sundays; the gage heights on the missing days were obtained by interpolation. Gage heights Dec. 19-31 were affected by ice conditions. Gage heights Dec. 22-31 are to top of ice

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	*6.5	6.5	9.7	3.8	*4.6	6.8	.....	.....	.....	.....	.....	.....
2	*6.1	6.4	9.4	3.8	4.65	6.1	.....	.....	.....	.....	.....	.....
3	5.7	6.2	8.9	*3.8	5.2	5.7	.....	.....	.....	.....	.....	.....
4	5.8	6.2	8.7	3.8	5.55	5.4	.....	.....	.....	.....	.....	.....
5	5.9	6.0	8.4	3.8	5.6	5.2	.....	.....	.....	.....	.....	.....
6	6.2	*5.9	*8.1	3.7	5.65	5.1	.....	.....	.....	.....	.....	.....
7	6.2	5.8	7.8	3.7	5.7	4.8	.....	.....	.....	.....	.....	.....
8	6.2	5.6	7.4	3.7	*6.0	4.5	.....	.....	.....	.....	.....	.....
9	*6.15	5.6	7.1	3.6	6.3	4.4	.....	.....	.....	.....	.....	.....
10	6.1	5.7	6.5	*3.55	6.45	4.3	.....	.....	.....	.....	.....	.....
11	7.1	5.4	6.1	3.5	7.1	4.2	.....	.....	.....	.....	.....	.....
12	7.9	5.4	6.0	3.5	7.55	4.0	.....	.....	.....	.....	.....	.....
13	8.2	*5.1	*5.85	3.4	8.0	3.8	.....	.....	.....	.....	.....	.....
14	8.4	4.8	5.7	3.4	8.2	3.7	.....	.....	.....	.....	.....	.....
15	8.8	4.8	5.7	3.4	*7.1	3.5	.....	.....	.....	.....	.....	.....
16	*9.3	4.8	5.6	3.6	6.0	3.4	.....	.....	.....	.....	.....	.....
17	9.8	4.9	5.4	*3.7	5.8	3.4	.....	.....	.....	.....	.....	.....
18	11.3	4.9	5.2	3.8	5.6	3.2	.....	.....	.....	.....	.....	.....
19	12.0	4.9	5.0	3.9	5.4	3.0	.....	.....	.....	.....	.....	.....
20	11.9	*4.9	*4.9	4.1	5.2	2.9	.....	.....	.....	.....	.....	.....
21	11.8	4.9	4.8	4.2	5.3	2.9	.....	.....	.....	.....	.....	.....
22	11.6	*4.9	4.8	4.1	*6.15	2.9	.....	.....	.....	.....	.....	.....
23	*10.5	4.9	4.7	4.0	7.0	2.8	.....	.....	.....	.....	.....	.....
24	9.4	4.9	4.6	4.2	8.9	2.7	.....	.....	.....	.....	.....	.....
25	9.0	4.3	4.5	4.4	10.2	2.6	.....	.....	.....	.....	.....	.....
26	8.5	4.0	4.5	5.2	10.1	2.5	.....	.....	.....	.....	.....	.....
27	7.5	*6.5	*4.4	5.0	9.4	2.7	.....	.....	.....	.....	.....	.....
28	7.0	9.0	4.3	4.9	8.5	5.4	.....	.....	.....	.....	.....	.....
29	6.8	.....	4.1	4.8	7.8	7.6	.....	.....	.....	.....	.....	.....
30	*6.65	.....	4.0	4.5	7.3	7.8	.....	.....	.....	.....	.....	.....
31	6.5	.....	3.9	.....	7.1	.....	.....	.....	.....	.....	.....	.....

* Gage height obtained by interpolation. Gage heights Jan. 1 and 10 were affected by ice conditions and no estimates of the discharges were made.

Kaskaskia River.

Daily Discharge of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

1908.

Day.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	850	298	64	38	.....	.....	.....	.....
2	.....	714	287	58	34	.....	.....	.....	.....
3	.....	690	265	58	29	.....	.....	.....	.....
4	.....	665	287	84	21	.....	.....	.....	.....
5	.....	1960	276	77	18	.....	.....	.....	.....
6	.....	2430	254	70	18	.....	.....	.....	.....
7	.....	3470	244	98	15	.....	.....	.....	.....
8	.....	3870	234	84	15	.....	.....	.....	.....
9	.....	3650	254	70	14	.....	.....	.....	.....
10	.....	3290	265	58	12	.....	.....	.....	.....
11	794	2930	254	53	12	.....	.....	.....	.....
12	696	2500	244	48	12	.....	.....	.....	.....
13	598	2280	234	43	10	.....	.....	.....	.....
14	518	1920	215	43	10	.....	.....	.....	.....
15	465	1820	196	38	10	.....	.....	.....	.....
16	416	1740	187	98	8	.....	.....	.....	.....
17	358	1450	178	84	6	.....	.....	.....	.....
18	332	1160	162	84	6	.....	.....	.....	.....
19	320	1130	154	88	6	.....	.....	.....	.....
20	309	1190	154	91	5	.....	.....	.....	.....
21	276	1260	146	91	5	.....	.....	.....	.....
22	254	1160	138	84	5	.....	.....	.....	.....
23	244	1030	130	77	4	.....	.....	.....	.....
24	372	926	122	58	3	.....	.....	.....	.....
25	714	822	114	53	3	.....	.....	.....	.....
26	952	689	106	50	2	.....	.....	.....	.....
27	1190	598	91	48	2	.....	.....	.....	.....
28	1230	518	84	48	1.5	.....	.....	.....	.....
29	1260	465	77	43	1.0	.....	.....	.....	.....
30	1070	448	77	43	.8	.....	.....	.....	.....
31	.....	432	.....	43	.7	.....	.....	.....	.....
Total	12368	48057	5727	2029	327	.....	.....	.....	.....

There was no flow from Sept. 1 to Dec. 31.

Kaskaskia River.

Daily Discharge of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	4	1600	130	577	1190	196	110	43	8	98	196
2	.....	4	1560	130	567	850	178	98	38	6	98	178
3	.....	6	1290	122	557	714	170	84	33	6	84	170
4	.....	15	1190	122	557	577	188	84	25	6	70	146
5	.....	98	1070	122	537	822	206	70	23	6	64	142
6	.....	254	909	598	518	768	224	64	20	6	58	138
7	.....	270	696	1850	500	714	465	53	18	5	56	138
8	.....	287	482	1740	482	557	767	46	15	5	53	122
9	.....	332	1000	1600	776	500	1000	38	12	5	53	122
10	.....	372	822	1530	1070	620	1070	33	10	5	48	114
11	.....	401	537	1460	1260	537	834	29	10	5	48	106
12	.....	372	386	1390	1130	345	598	25	9	4	48	165
13	.....	320	332	2390	909	358	1390	25	8	4	53	224
14	.....	353	326	3040	740	372	2720	21	8	4	116	345
15	.....	386	320	2720	557	320	3180	20	6	4	178	689
16	.....	448	309	2460	472	265	3290	18	6	4	205	740
17	.....	482	298	2030	386	254	2390	18	6	16	309	689
18	.....	598	298	1880	332	234	1890	15	5	29	500	665
19	.....	767	287	1740	298	205	1390	15	4.5	38	482	550
20	.....	971	234	1820	287	200	1000	12	4	38	448	500
21	.....	1120	224	1920	244	196	665	12	4	33	396	450
22	.....	1260	214	2030	234	187	482	11	12	33	345	400
23	.....	1260	205	2100	224	214	465	10	25	58	287	350
24	.....	1640	187	1670	214	276	432	10	21	94	298	300
25	0.5	2820	170	1480	244	205	382	6	18	130	276	250
26	.5	2540	170	1290	332	187	332	12	16	122	254	200
27	.7	2030	162	1070	665	166	298	70	15	122	234	170
28	.7	1820	154	879	2280	146	234	64	12	114	229	150
29	1.0	.....	146	689	1960	146	170	56	10	106	224	130
30	1.0	....	138	620	1640	130	138	48	8	106	214	100
31	2.5	.....	130	.....	1330	.....	122	48	.....	102	.....	100
Total.	6.9	21230	15846	42622	21879	12255	26866	1225	444.5	1224	5826	8739

Year period, 158163.4; discharge Dec. 19 to Dec. 31 was estimated from the gage readings and from climatological and other data. There was no discharge from Jan. 1-24.

Kaskaskia River.

Daily Discharge of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

1910.

Day.	Jan	Feb.	Mar.	Apr.	May.	June.
1	.....	386	1160	114	178	432
2	.....	372	1070	114	182	332
3	.....	345	909	114	234	287
4	.....	345	850	114	270	254
5	.....	320	767	114	276	234
6	.....	309	689	106	282	224
7	.....	298	620	106	287	196
8	.....	276	537	106	320	170
9	.....	276	482	98	358	162
10	.....	287	386	94	379	154
11	482	254	332	91	482	146
12	642	254	320	91	567	130
13	714	224	304	84	665	114
14	767	196	287	84	714	106
15	879	196	287	84	482	91
16	1030	196	276	98	320	84
17	1190	205	254	106	298	84
18	1710	205	234	114	276	70
19	1960	205	214	122	254	58
20	1920	205	205	138	234	53
21	1890	205	196	146	244	53
22	1820	205	196	138	338	53
23	1430	205	187	130	465	48
24	1070	205	178	146	909	43
25	940	154	170	162	1330	38
26	794	130	170	234	1290	33
27	557	386	162	214	1070	43
28	465	940	154	205	794	254
29	432	.....	138	196	620	577
30	408	.....	130	170	518	620
31	386	.....	122	.....	482	.....
Total	21486	7784	11986	3833	15118	5143

Kaskaskia River.

Rating Table for Kaskaskia River near Arcola, Ill.

1909 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
0.00	..	3.20	70	6.40	372	9.60	1130
0.10	..	3.30	77	6.50	386	9.70	1162
0.20	..	3.40	84	6.60	401	9.80	1194
0.30	..	3.50	91	6.70	416	9.90	1227
0.40	..	3.60	98	6.80	432	10.00	1260
0.50	0	3.70	106	6.90	448	10.10	1293
0.60	.1	3.80	114	7.00	465	10.20	1326
0.70	.3	3.90	122	7.10	482	10.30	1360
0.80	.5	4.00	130	7.20	500	10.40	1394
0.90	.7	4.10	138	7.30	518	10.50	1428
1.00	1.0	4.20	146	7.40	537	10.60	1462
1.10	1.5	4.30	154	7.50	557	10.70	1496
1.20	2.0	4.40	162	7.60	577	10.80	1530
1.30	3	4.50	170	7.70	598	10.90	1565
1.40	4	4.60	178	7.80	620	11.00	1600
1.50	5	4.70	187	7.90	642	11.10	1636
1.60	6	4.80	196	8.00	665	11.20	1672
1.70	8	4.90	205	8.10	689	11.30	1708
1.80	10	5.00	214	8.20	714	11.40	1744
1.90	12	5.10	224	8.30	740	11.50	1780
2.00	15	5.20	234	8.40	767	11.60	1816
2.10	18	5.30	244	8.50	794	11.70	1852
2.20	21	5.40	254	8.60	822	11.80	1888
2.30	25	5.50	265	8.70	850	11.90	1924
2.40	29	5.60	276	8.80	879	12.00	1960
2.50	33	5.70	287	8.90	909	13.00	2320
2.60	38	5.80	298	9.00	940	14.00	2600
2.70	43	5.90	309	9.10	971	15.00	3040
2.80	48	6.00	320	9.20	1002	16.00	3400
2.90	53	6.10	332	9.30	1034	17.00	3760
3.00	58	6.20	345	9.40	1066	18.00	4120
3.10	64	6.30	358	9.50	1098		

The above table is not applicable for ice or obstructed channel conditions. It is based on 12 discharge measurements made during 1908–1910, and is well defined between gage heights 2.7 feet and 10.0 feet. Above gage height 11.0 feet the rating curve is a tangent, the difference being 36 per tenth.

Kaskaskia River.

Monthly Discharge of Kaskaskia River near Arcola, Ill., for 1908 to 1910.

(Drainage area 390 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
April 11-31	1260	244	618	1.58	1.18	A
May	3870	432	1550	3.97	4.58	B
June	298	77	191	.490	.55	A
July	98	38	65.5	.168	.19	B
August	38	.7	10.5	.027	.03	C
September	0	0	0	0	0	.....
October	0	0	0	0	0	.....
November	0	0	0	0	0	.....
December	0	0	0	0	0	.....
1909						
January 1-31	2.5	0	.22	.00056	.0006	D
February	2820	4	758	1.94	2.02	B
March	1600	130	511	1.31	1.51	A
April	3040	122	1420	3.64	4.06	B
May	2280	214	706	1.81	2.09	A
June	1190	130	408	1.05	1.17	A
July	3290	122	867	2.22	2.56	B
August	110	6	39.5	.101	.12	B
September	43	4	14.8	.038	.04	B
October	130	4	39.5	.101	.12	B
November	500	48	194	.497	.55	A
December	740	.....	282	.723	.83	C
The year	3290	0	437	1.12	15.08	.....
1910						
January 11-31	1960	.....	1023	2.62	2.05	C
February	940	130	278	.713	.74	A
March	1170	122	387	.992	1.14	A
April	234	84	128	.328	.37	A
May	1330	178	488	1.25	1.44	A
June	620	33	171	.438	.49	A

Kaskaskia River at Shelbyville, Ill.

This station is located at the highway bridge at the edge of Shelbyville, just above the C. & E. I. and Big Four Railroad bridges and just below the pumping station of the City Water Company of Shelbyville. It was established Feb. 25, 1908, for the purpose of collecting data for use in studying drainage and flood control problems, and to obtain general statistical and comparative data.

There are no tributaries of any size entering the stream near Shelbyville. The drainage area above the gaging station is about 1,030 square miles.

The datum of the gage has remained unchanged since its installation. The gage heights may be affected during high water by backwater caused by the lodging of drift at the two railroad bridges below the gaging station. The records are accurate and reliable.

Kaskaskia River.

Discharge Measurements of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
February 24	R. J. Taylor	147	975	2.41	11.53	2353
April	R. J. Taylor	149	1023	2.66	12.2	2720
June	R. J. Taylor	113	1009	1.07	8.7	1084
July	R. J. Taylor	1035	713	0.30	6.3	218
1909						
February 8	R. J. Taylor	105	788	0.51	6.85	402
February 9	R. J. Taylor	108	852	0.67	7.32	572
March 17	Wm. M. O'Neill	110	560	1.36	8.00	761
May 14	H. J. Jackson	151	995	2.14	11.48	2134
May 15	H. J. Jackson	124	892	2.14	10.76	1906
December 9	H. J. Jackson	102	224	0.96	*6.40	216
1910						
March 4	M. E. McChristie	110	443	1.80	7.94	797
May 14	H. J. Jackson	123	770	2.29	10.47	1769
May 30	H. J. Jackson	141	866	2.38	11.27	2069

*47 per cent of discharge under ice cover.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	15.1	11.6	11.8	8.6	6.4	5.8	5.4	5.3	4.9	5.4
2	.....	.....	15.5	12.8	11.4	8.4	6.3	5.7	5.3	5.2	5.0	5.4
3	.....	.....	16.4	11.8	10.4	8.3	6.4	5.7	5.3	5.2	5.0	5.4
4	.....	.....	16.0	11.4	21.2	8.8	6.3	5.6	5.2	5.2	5.1	5.3
5	.....	.....	15.6	9.9	22.8	8.4	6.3	5.6	5.2	5.1	5.1	5.3
6	.....	.....	15.4	9.6	22.3	8.1	6.4	5.5	5.2	5.1	5.2	5.3
7	.....	.....	15.8	9.5	22.7	7.8	6.7	5.5	5.2	5.1	5.2	5.3
8	.....	.....	16.2	11.5	25.8	7.6	6.8	5.5	5.2	5.1	5.2	5.3
9	.....	.....	16.6	11.7	23.6	8.0	6.9	5.6	5.1	5.1	5.2	5.3
10	.....	.....	17.0	11.8	21.2	8.4	6.6	5.7	5.1	5.1	5.2	5.4
11	.....	.....	16.8	11.5	20.2	8.3	6.5	5.7	5.0	5.1	5.2	5.4
12	.....	.....	15.8	11.3	19.5	7.9	6.5	5.6	5.0	5.1	5.2	5.4
13	.....	.....	14.8	11.1	18.8	7.6	6.3	5.7	5.0	5.1	5.2	5.4
14	.....	.....	14.2	11.0	17.9	7.5	6.2	5.6	5.0	5.1	5.2	5.4
15	.....	.....	13.6	10.1	17.0	7.3	6.0	5.6	5.0	5.0	5.2	5.4
16	.....	.....	13.1	9.6	16.4	7.0	6.0	5.5	5.0	5.0	5.3	5.4
17	.....	.....	11.9	8.9	15.9	6.9	5.9	5.5	5.1	5.0	5.3	5.3
18	.....	.....	10.9	8.8	15.0	6.7	5.8	5.5	5.1	5.0	5.3	5.3
19	.....	.....	10.0	8.7	14.9	6.6	6.1	5.4	5.1	5.0	5.3	5.3
20	.....	.....	10.1	8.6	13.7	6.8	6.1	5.4	5.1	5.0	5.3	5.3
21	.....	.....	9.7	8.5	12.8	6.7	6.1	5.4	5.1	5.0	5.3	5.3
22	.....	.....	9.6	8.4	13.7	6.7	6.0	5.3	5.0	5.0	5.4	5.3
23	.....	.....	9.5	8.3	13.1	6.6	6.0	5.3	5.0	4.9	5.4	5.3
24	.....	.....	9.4	10.1	12.6	6.5	5.9	5.3	5.0	4.9	5.5	5.3
25	.....	14.2	9.3	10.6	12.0	6.5	5.8	5.3	5.0	4.9	5.5	5.2
26	.....	16.4	9.0	11.2	11.5	6.4	5.8	5.3	5.0	5.0	5.6	5.2
27	.....	17.0	8.7	11.8	11.3	6.3	5.7	5.3	5.0	5.0	5.6	5.2
28	.....	16.6	8.5	12.2	10.0	6.1	5.7	5.2	5.1	5.0	5.5	5.3
29	.....	15.3	8.9	12.4	9.8	6.2	5.6	5.2	5.2	4.9	5.5	5.3
30	.....	.....	8.9	11.9	9.4	6.3	5.7	5.3	5.3	4.9	5.5	5.4
31	.....	.....	8.7	.....	9.0	.....	5.8	5.3	.....	4.9	.....	5.4

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.4	5.7	12.8	6.8	13.3	14.9	6.9	6.7	5.4	5.2	5.9	6.8
2	5.4	5.8	12.0	6.8	10.5	14.3	6.5	6.6	5.4	5.2	5.8	6.7
3	5.4	5.8	11.0	6.7	10.4	14.2	6.5	6.4	5.4	5.2	5.8	6.7
4	5.4	5.9	10.3	6.7	10.4	13.5	6.4	6.3	5.4	5.2	5.7	6.6
5	5.4	6.1	9.7	6.7	10.3	12.5	11.1	6.2	5.3	5.2	5.7	6.6
6	5.4	6.2	9.3	15.9	9.9	11.9	12.2	6.0	5.3	5.1	5.7	6.5
7	5.4	6.6	9.4	15.8	9.8	11.5	17.3	5.9	5.2	5.1	5.8	6.6
8	5.4	7.0	9.6	15.0	9.9	10.9	17.7	5.8	5.2	5.1	5.8	6.6
9	5.4	7.1	9.8	14.1	13.9	10.5	16.6	5.8	5.3	5.1	5.7	6.6
10	5.4	7.3	9.6	13.0	13.9	11.9	13.2	5.8	5.3	5.1	5.7	6.6
11	5.4	7.5	9.3	12.8	13.8	11.9	11.9	5.8	5.3	5.1	5.6	6.5
12	5.3	7.9	9.1	14.7	13.6	10.9	11.9	5.7	5.2	5.1	5.8	6.9
13	5.3	8.2	9.0	19.4	11.9	10.3	13.8	5.7	5.2	5.1	5.8	7.6
14	5.3	8.6	8.7	20.8	11.65	10.2	12.9	5.6	5.2	5.1	5.9	8.7
15	5.3	8.8	8.4	19.8	11.0	10.4	12.5	5.5	5.2	5.1	5.9	9.7
16	5.3	9.0	8.1	18.9	10.1	9.8	11.9	5.4	5.2	5.1	6.9	9.9
17	5.3	9.7	8.6	18.0	9.3	10.6	12.6	5.4	5.2	5.1	6.8	9.8
18	5.3	11.0	7.8	17.3	8.9	9.6	13.7	5.3	5.2	5.3	7.6	9.6
19	5.4	12.1	7.7	16.3	8.6	8.9	13.9	5.3	5.2	5.6	7.6	8.9
20	5.5	13.2	7.6	14.8	8.2	7.9	13.3	5.3	5.2	5.7	7.6	9.2
21	5.6	13.5	7.5	17.5	7.2	7.5	11.9	5.3	5.2	5.7	7.8	9.1
22	5.7	13.6	7.3	18.9	7.7	7.4	11.7	5.2	5.2	5.6	8.1	8.9
23	5.8	13.7	7.1	19.8	7.6	7.4	10.5	5.0	5.2	6.0	8.3	8.8
24	5.8	14.2	7.3	17.3	7.4	7.2	9.6	5.1	5.6	6.0	8.2	8.7
25	5.8	14.3	7.4	17.2	7.7	7.2	7.6	5.1	5.6	6.0	8.1	8.2
26	5.7	14.3	7.5	16.8	9.4	7.8	7.7	5.3	5.4	6.0	7.7	8.1
27	5.7	13.9	7.4	15.7	11.2	7.7	7.5	5.2	5.3	6.0	7.5	7.9
28	5.7	13.3	7.1	13.9	11.0	7.6	7.2	5.2	5.3	6.0	7.3	7.9
29	5.7	.....	7.1	13.8	11.2	7.3	6.9	5.4	5.3	6.0	7.1	7.6
30	5.7	.....	7.0	12.0	12.6	7.2	6.8	5.4	5.3	6.0	6.9	7.6
31	5.7	.....	6.9	.....	14.2	.....	6.7	5.5	.....	5.9	.....	7.6

Gage heights Jan. 6-18, 29-31, Feb. 1, Dec. 7-11, Dec. 20-31, were affected by ice conditions.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	7.6	7.9	14.1	6.5	6.8	9.6
2	7.9	7.7	13.1	6.5	6.7	9.2
3	7.9	7.8	13.3	6.4	7.4	8.8
4	8.2	7.7	13.5	6.4	7.8	8.5
5	8.2	7.7	13.6	6.4	8.2	8.5
6	9.1	7.6	11.6	6.4	8.1	8.1
7	9.1	7.5	11.1	6.3	9.1	7.7
8	9.4	7.6	10.4	6.3	9.8	7.4
9	9.6	7.4	9.9	6.1	9.9	7.3
10	8.5	7.3	9.4	6.1	9.1	7.1
11	7.9	7.2	8.9	6.1	10.5	7.1
12	7.8	7.0	8.5	6.2	11.2	6.9
13	10.5	6.6	8.5	6.2	11.1	6.8
14	13.1	6.9	7.9	6.2	10.5	6.6
15	13.9	6.9	7.6	6.2	10.1	6.5
16	13.5	6.9	7.5	6.6	9.7	6.5
17	12.6	6.7	7.4	6.7	9.2	6.4
18	15.1	6.5	7.3	6.7	8.6	6.4
19	17.0	6.7	7.2	6.7	8.2	6.4
20	18.6	6.6	7.1	6.7	8.1	6.3
21	15.6	7.1	6.9	6.7	7.9	6.1
22	14.0	7.0	6.9	6.6	8.7	5.9
23	13.5	7.0	6.9	6.6	14.1	5.9
24	12.2	6.8	6.8	6.5	15.2	5.9
25	11.2	6.7	6.8	6.5	16.2	5.9
26	10.5	6.7	6.7	6.5	15.8	5.9
27	9.7	11.9	6.7	6.6	13.3	6.4
28	9.1	13.5	6.7	6.7	12.5	6.8
29	8.8	.....	6.6	6.9	12.2	7.1
30	8.5	.....	6.6	6.8	11.4	7.6
31	8.2	.....	6.5	.....	10.4	.....

Gage heights Jan. 1-11 were affected by ice conditions and discharges were not estimated.

Kaskaskia River.

Daily Discharge of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	4260	2400	2500	1030	256	90	34	25	8	34
2	.....	.....	4480	3000	2300	956	224	73	25	18	10	34
3	.....	.....	4990	2500	1810	918	256	73	25	18	10	34
4	.....	.....	4760	2300	7820	1110	224	58	18	18	13	25
5	.....	.....	4540	1580	8780	956	224	58	18	13	13	25
6	.....	.....	4420	1450	8480	846	256	45	18	13	18	25
7	.....	.....	4650	1400	8720	738	358	45	18	13	18	25
8	.....	.....	4870	2350	10600	666	392	45	18	13	18	25
9	.....	.....	5100	2450	9260	810	426	58	13	13	18	25
10	.....	.....	5330	2500	7820	956	324	73	13	13	18	34
11	.....	.....	5220	2350	7220	918	290	73	10	13	18	34
12	.....	.....	4650	2250	6800	774	290	58	10	13	18	34
13	.....	.....	4090	2150	6480	666	224	73	10	13	18	34
14	.....	.....	3760	2100	5850	630	192	58	10	13	18	34
15	.....	.....	3430	1680	5330	562	130	58	10	10	18	34
16	.....	.....	3160	1450	4990	460	130	45	10	10	25	34
17	.....	.....	2550	1150	4700	426	109	45	13	10	25	25
18	.....	.....	2050	1110	4200	358	90	45	13	10	25	25
19	.....	.....	1630	1070	4140	324	160	34	13	10	25	25
20	.....	.....	1680	1030	3480	392	160	34	13	10	25	25
21	.....	.....	1490	994	3000	358	160	34	13	10	25	25
22	.....	.....	1450	956	3480	358	130	25	10	10	34	25
23	.....	.....	1400	918	3160	324	130	25	10	8	34	25
24	.....	.....	1360	1680	2980	290	109	25	10	8	45	25
25	.....	3760	1310	1910	2600	290	90	25	10	8	45	18
26	.....	4990	1190	2200	2350	256	90	25	10	10	58	18
27	.....	5330	1070	2500	2250	224	73	25	10	10	58	18
28	.....	5100	994	2700	1630	160	73	18	13	10	45	25
29	.....	4370	1150	2800	1540	192	58	18	18	8	45	25
30	.....	.....	1150	2550	1350	224	73	25	25	8	45	34
31	.....	.....	1070	.....	1190	.....	90	25	.....	8	.....	34
Total.	.....	23550	93254	57178	140740	17172	5791	1411	441	367	793	862

Kaskaskia River.

Daily Discharge of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	34	40	3000	392	3260	4140	426	358	34	18	109	392
2.....	34	90	2600	392	1860	3820	290	324	34	18	90	358
3.....	34	90	2100	358	1810	3760	290	256	34	18	90	358
4.....	34	109	1770	358	1810	3380	256	224	34	18	73	324
5.....	34	160	1490	358	1770	2850	2150	192	25	18	73	324
6.....	30	192	1310	4700	1580	2550	2700	130	25	13	73	290
7.....	30	324	1360	4650	1540	2350	5500	109	18	13	90	250
8.....	25	460	1450	4200	1580	2050	5740	90	18	13	90	230
9.....	25	494	1540	3700	3600	1860	5100	90	25	13	73	216
10.....	25	562	1440	3100	3600	2550	3240	90	25	13	73	200
11.....	20	630	1310	3000	3540	2550	2550	90	25	13	58	200
12.....	20	774	1230	4040	3430	2050	2550	73	18	13	90	426
13.....	20	882	1190	6740	2550	1770	3540	73	18	13	90	666
14.....	25	1030	1070	7580	2420	1720	3050	58	18	13	109	1070
15.....	25	1110	956	6980	2100	1810	2850	45	18	13	109	1490
16.....	25	1190	846	6540	1680	1540	2550	34	18	13	426	1580
17.....	25	1490	1030	5910	1310	1910	2900	34	18	13	392	1540
18.....	30	2100	738	5500	1150	1450	3480	25	18	25	666	1450
19.....	34	2650	702	4930	1030	1150	3600	25	18	58	666	1150
20.....	45	3210	666	4090	882	774	3260	25	18	73	666	1000
21.....	58	3380	630	5620	528	630	2550	25	18	73	738	850
22.....	73	3430	562	6540	702	596	2450	18	18	58	956	700
23.....	90	3480	494	6980	666	596	1860	13	18	130	918	600
24.....	90	3760	562	5500	596	528	1450	13	58	130	882	520
25.....	90	3820	596	5450	702	528	666	13	58	130	846	470
26.....	73	3820	630	5220	1360	738	702	25	34	130	702	400
27.....	73	3600	596	4590	2200	702	630	18	25	130	630	350
28.....	73	3260	494	3600	2100	666	528	18	25	130	562	300
29.....	60	.....	494	3540	2200	562	426	34	25	130	494	250
30.....	50	.....	460	2600	2900	528	392	34	25	130	426	220
31.....	40	.....	426	.....	3760	.....	358	45	.....	109	.....	200
Total.	1344	46137	33742	127158	60216	52108	68004	2601	763	1682	11260	18374

Year period 423389. Discharge Jan. 6-18, 29-31, Feb. 1, Dec. 7-11, and Dec. 20-31 was estimated from the gage readings and from climatological and other data.

Kaskaskia River.

Daily Discharge of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	.....	774	3700	290	392	1450
2	.....	702	3160	290	358	1270
3	.....	738	3260	256	596	1110
4	.....	702	3380	256	738	994
5	.....	702	3430	256	882	994
6	.....	666	2400	256	846	846
7	.....	630	2150	224	1230	702
8	.....	666	1810	221	1540	596
9	.....	596	1580	160	1580	562
10	.....	562	1360	160	1230	494
11	.....	528	1150	160	1860	494
12	738	460	994	192	2200	426
13	1860	324	994	192	2150	392
14	3160	426	774	192	1860	324
15	3600	426	666	192	1680	290
16	3380	426	630	324	1490	290
17	2900	358	596	358	1270	256
18	4260	290	562	358	1030	256
19	5330	358	528	358	882	256
20	6360	324	494	358	846	224
21	4540	494	426	358	774	160
22	3650	460	426	324	1070	109
23	3380	460	426	324	3700	109
24	2700	392	392	290	4310	109
25	2200	358	392	290	4870	109
26	1860	358	358	290	4650	109
27	1490	2550	358	324	3260	256
28	1230	3380	358	358	2850	392
29	1110	.....	324	426	2700	494
30	994	.....	324	392	2300	666
31	882	.....	290	.....	1810	.....
Total	55624	19110	37692	8432	56954	14739

Kaskaskia River.

Rating Table for Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
4.00	..	8.90	1150	13.80	3540	18.60	6364
4.10	..	9.00	1190	13.90	3595	18.70	6423
4.20	..	9.10	1230	14.00	3650	18.80	6482
4.30	..	9.20	1272	14.10	3705	18.90	6544
4.40	..	9.30	1314	14.20	3760	19.00	6500
4.50	..	9.40	1358	14.30	3815	19.10	6560
4.60	..	9.50	1402	14.40	3870	19.20	6620
4.70	..	9.60	1446	14.50	3925	19.30	6680
4.80	..	9.70	1492	14.60	3980	19.40	6740
4.90	8	9.80	1538	14.70	4035	19.50	6800
5.00	10	9.90	1584	14.80	4090	19.60	6860
5.10	13	10.00	1630	14.90	4145	19.70	6920
5.20	18	10.10	1676	15.00	4200	19.80	6980
5.30	25	10.20	1722	15.10	4256	19.90	7040
5.40	34	10.30	1768	15.20	4312	20.00	7100
5.50	45	10.40	1814	15.30	4368	20.10	7160
5.60	58	10.50	1860	15.40	4424	20.20	7220
5.70	73	10.60	1908	15.50	4480	20.30	7280
5.80	90	10.70	1956	15.60	4536	20.40	7340
5.90	109	10.80	2004	15.70	4592	20.50	7400
6.00	130	10.90	2052	15.80	4648	20.60	7460
6.10	160	11.00	2100	15.90	4704	20.70	7520
6.20	192	11.10	2150	16.00	4760	20.80	7580
6.30	224	11.20	2200	16.10	4817	20.90	7640
6.40	256	11.30	2250	16.20	4874	21.00	7700
6.50	290	11.40	2300	16.30	4931	21.10	7760
6.60	324	11.50	2350	16.40	4988	21.20	7820
6.70	358	11.60	2400	16.50	5045	21.30	7880
6.80	392	11.70	2450	16.60	5102	21.40	7940
6.90	426	11.80	2500	16.70	5159	21.50	8000
7.00	460	11.90	2550	16.80	5216	21.60	8060
7.10	494	12.00	2600	16.90	5273	21.70	8120
7.20	528	12.10	2650	17.00	5330	21.80	8180
7.30	562	12.20	2700	17.10	5388	21.90	8240
7.40	596	12.30	2750	17.20	5446	22.00	8300
7.50	630	12.40	2800	17.30	5504	22.10	....
7.60	666	12.50	2850	17.40	5562	22.20	....
7.70	702	12.60	2900	17.50	5620	22.30	....
7.80	738	12.70	2950	17.60	5678	22.40	....
7.90	774	12.80	3000	17.70	5736	22.50	....
8.00	810	12.90	3050	17.80	5794	22.60	....
8.10	846	13.00	3100	17.90	5852	22.70	....
8.20	882	13.10	3155	18.00	5910	22.80	....
8.30	918	13.20	3210	18.10	5969	22.90	....
8.40	956	13.30	3265	18.20	6028	23.00	8900
8.50	994	13.40	3320	18.30	6187	24.00	9500
8.60	1032	13.50	3375	18.40	6246	25.00	10100
8.70	1070	13.60	3430	18.50	6305	26.00	10700
8.80	1110	13.70	3485				

Note—The above table is not applicable for ice or obstructed channel conditions. It is based on 13 discharge measurements made during 1908–1910, and is well defined between gage heights 6.3 feet and 12.2 feet. Above gage height 19.0 feet the rating curve is a tangent, the difference being 60 per tenth.

Kaskaskia River.

Monthly Discharge of Kaskaskia River at Shelbyville, Ill., for 1908 to 1910.

(Drainage area 1,030 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
January						
February 25-29	5330	3760	4710	4.57	.85	B
March	5330	994	3010	2.92	3.37	B
April	3000	918	1920	1.86	2.08	A
May	10600	1190	4730	4.59	5.29	B
June	1110	160	572	.555	.62	B
July	426	58	187	.182	.21	B
August	90	18	45.5	.044	.05	C
September	34	10	14.7	.014	.02	C
October	25	8	11.8	.011	.01	C
November	58	8	26.4	.026	.03	C
December	34	18	27.8	.027	.03	C
The year						
1909						
January	90		43.4	.042	.05	C
February	3820		1650	1.60	1.67	B
March	3000	426	1090	1.06	1.22	B
April	7580	358	4240	4.12	4.60	B
May	3760	528	1940	1.88	2.17	B
June	4140	528	1740	1.69	1.89	B
July	5740	256	2190	2.13	2.46	B
August	358	13	83.9	.081	.09	B
September	58	18	25.4	.025	.03	C
October	130	13	54.3	.053	.06	C
November	956	58	375	.364	.41	B
December	1580		593	.576	.66	C
The year	7580		1240	1.14	15.31	
1910						
January 1-31	6360		2781	2.70	2.01	B
February	3780	290	682	.662	.69	A
March	3700	290	1220	1.18	1.36	B
April	426	160	281	.273	.30	A
May	4870	358	1840	1.79	2.06	B
June	1450	109	491	.477	.53	A

Kaskaskia River at Vandalia, Ill.

This station is located at the highway bridge at the east end of Main street, Vandalia, Ill. It was established Feb. 26, 1908, to obtain data for use in studying drainage questions, flood protection, levee construction, and for general statistical and comparative purposes. No tributaries of any size enter the river near Vandalia. The drainage area above this point is about 1,980 square miles.

The river for some miles above and below Vandalia is leveed along the left bank. It is claimed that these levees, by confining the floods, have caused floods of unusual height on the right side of the river, and a number of law suits have been instituted to recover damages to property situated on the right bank. During extreme floods these levees sometimes give way, thus reducing the flood flow; all the water, however, eventually passes the gaging section.

The datum of the gage has remained unchanged since its installation. The records are reliable and accurate.

Kaskaskia River.

Discharge Measurements of Kaskaskia River at Vandalia, Ill.

1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
February 26	R. J. Taylor	155	2349	2.93	18.53	6874
March 19	R. J. Taylor	128	1506	1.59	10.1	2400
March 20	R. J. Taylor	128	1434	1.49	9.6	2133
April 30	R. J. Taylor	151	1886	1.91	12.9	3597
July 6	R. J. Taylor	112	713	0.40	3.6	287
August 6	R. J. Taylor	106	563	0.15	2.3	84
1909						
February 20	R. J. Taylor	156	2439	2.18	15.78	5327
March 16	Wm. M. O'Neill	132	1154	1.16	7.26	1339
March 24	Wm. M. O'Neill	121	908	0.77	5.33	702
May 13	H. J. Jackson	151	2095	1.96	13.86	4105
May 22	H. J. Jackson	123	1033	0.99	6.41	1027
Nov. 22	H. J. Jackson	124	1076	1.34	7.15	1439
1910						
March 26	H. J. Jackson	119	762	0.70	4.78	533
May 29	H. J. Jackson	152	2010	1.99	13.90	4000
June 4	H. J. Jackson	126	1130	1.39	8.05	1570

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	18.2	8.2	11.7	7.4	4.0	2.4	2.0	1.5	1.3	1.8
2	.....	.....	18.0	12.0	11.0	7.5	3.8	2.3	1.9	1.5	1.3	1.7
3	.....	.....	17.8	13.2	10.6	7.0	3.9	2.2	1.7	1.6	1.3	1.7
4	.....	.....	17.6	12.2	13.9	6.6	3.8	2.0	1.6	1.6	1.3	1.6
5	.....	.....	17.2	10.5	17.1	6.6	3.6	1.9	1.5	1.6	1.3	1.6
6	.....	.....	17.4	10.4	21.2	6.8	3.6	2.0	1.5	1.5	1.3	1.6
7	.....	.....	17.8	10.3	20.5	6.6	3.5	2.1	1.5	1.5	1.3	1.6
8	.....	.....	17.4	12.4	20.8	6.4	3.6	2.2	1.4	1.4	1.2	1.7
9	.....	.....	18.0	15.0	19.9	5.6	4.4	1.8	1.4	.....	1.2	1.8
10	.....	.....	18.8	15.6	19.2	5.8	4.3	1.8	1.5	.....	1.2	1.8
11	.....	.....	18.9	14.2	18.5	6.3	4.0	1.7	1.5	.....	1.3	1.8
12	.....	.....	18.4	12.2	18.1	6.0	3.7	1.6	1.4	1.3	1.3	1.8
13	.....	.....	17.7	10.6	18.1	6.1	3.5	1.8	1.4	1.3	1.3	1.8
14	.....	.....	17.0	9.8	17.7	5.8	3.3	2.0	1.5	1.3	1.3	1.7
15	.....	.....	16.3	9.4	17.3	5.2	3.2	2.0	1.5	1.3	1.3	1.7
16	.....	.....	14.6	9.0	17.1	5.2	3.2	2.2	1.5	1.3	1.3	1.7
17	.....	.....	12.7	8.2	17.0	4.8	3.1	2.4	1.5	1.3	1.4	1.7
18	.....	.....	11.3	8.0	16.8	4.6	3.8	2.6	1.4	1.3	1.5	1.7
19	.....	.....	10.0	8.2	16.5	4.5	3.6	2.3	1.4	1.3	1.5	1.7
20	.....	.....	9.6	8.3	16.0	4.8	3.6	2.2	1.5	1.3	1.6	1.7
21	.....	.....	9.2	7.7	15.0	6.6	3.6	2.0	1.2	1.3	1.6	1.7
22	.....	.....	8.8	6.9	14.9	5.6	3.8	1.9	1.2	1.3	1.6	1.6
23	.....	.....	8.7	6.5	16.6	5.0	3.2	1.8	1.4	1.3	1.6	1.6
24	.....	.....	8.7	9.9	16.8	4.6	3.0	1.7	1.4	1.3	1.6	1.6
25	.....	.....	8.6	15.1	15.9	4.2	2.9	1.6	1.3	1.3	1.6	1.6
26	.....	18.4	8.2	16.2	14.4	4.1	2.8	1.6	1.3	1.3	1.7	1.6
27	.....	19.5	7.8	16.3	12.1	4.0	2.7	1.5	1.4	1.3	1.7	1.6
28	.....	19.8	7.6	16.2	10.6	3.7	2.7	1.5	1.4	1.3	1.8	1.5
29	.....	19.0	7.4	15.1	9.6	3.5	2.6	1.5	1.5	1.3	1.8	1.5
30	.....	.....	7.2	13.0	9.0	4.4	2.6	1.6	1.5	1.3	1.8	1.5
31	.....	.....	7.1	.....	8.4	.....	2.4	1.7	.....	1.3	.....	1.5

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.7	3.8	12.85	4.9	12.15	13.2	5.8	6.85	1.9	1.7	2.9	4.9
2	1.8	2.7	11.55	4.75	11.0	13.1	5.0	5.2	1.9	1.7	2.8	4.8
3	1.8	2.75	10.05	4.6	10.1	13.65	4.6	4.65	1.9	1.7	2.8	4.8
4	1.7	2.8	9.35	4.5	9.65	14.1	4.3	4.3	1.9	1.7	2.7	4.7
5	1.7	2.6	9.0	4.4	9.3	14.8	4.1	4.05	1.9	1.7	2.7	4.65
6	1.7	6.35	8.5	10.35	9.0	14.9	6.2	3.85	1.9	1.6	2.65	4.4
7	1.7	8.4	7.9	17.7	8.45	12.65	10.6	3.65	1.9	1.6	2.6	4.3
8	1.7	5.85	7.55	20.3	8.1	11.05	14.0	3.45	1.9	1.6	4.5	4.2
9	1.7	5.6	14.05	18.8	11.35	9.8	15.6	3.35	2.65	1.6	3.85	4.15
10	1.6	8.9	16.75	17.4	14.85	9.5	16.4	3.15	4.0	1.55	3.6	4.1
11	1.6	8.55	17.1	16.5	16.55	11.35	17.0	3.0	2.8	1.5	3.35	4.4
12	1.6	6.1	13.55	15.5	15.25	10.0	17.6	2.9	2.5	1.5	4.9	5.7
13	1.6	4.8	9.75	18.3	13.75	12.85	17.9	2.85	2.3	1.5	9.7	10.3
14	1.6	6.6	8.35	20.9	13.7	14.5	18.4	2.75	2.15	1.5	8.1	11.6
15	1.6	13.35	7.75	19.7	12.35	11.7	18.2	2.7	2.0	1.6	5.4	9.9
16	1.6	12.75	7.3	18.6	10.8	9.05	17.0	2.6	1.9	1.7	6.5	9.05
17	1.7	7.95	6.9	18.25	9.65	12.75	15.7	2.6	1.9	1.7	11.55	8.8
18	1.7	7.6	6.5	17.85	8.65	15.15	13.85	2.5	1.8	1.7	9.25	8.65
19	1.85	11.3	6.2	17.5	7.95	12.8	12.75	2.5	1.8	2.6	7.6	8.4
20	2.35	15.55	6.0	17.4	7.35	7.7	12.4	2.4	2.3	4.1	6.7	7.9
21	2.95	16.8	5.9	17.75	6.8	6.75	12.2	2.3	3.35	3.75	6.15	.....
22	3.0	16.9	5.75	18.35	6.45	6.2	11.25	2.2	3.85	3.6	7.8	.....
23	3.0	16.75	5.45	18.45	6.05	5.7	9.9	2.2	4.2	3.8	10.65	.....
24	2.8	16.95	5.35	18.0	5.9	5.6	8.65	2.15	3.0	4.25	11.15	.....
25	2.65	17.2	6.6	17.6	6.15	5.25	8.1	2.1	2.65	4.05	9.9	*5.5
26	2.55	16.85	7.25	17.25	8.6	5.4	6.8	2.1	2.15	2.95	7.9	.....
27	2.5	15.9	6.6	16.8	8.75	5.85	6.5	2.0	2.05	3.15	6.85	.....
28	2.45	14.3	5.75	16.55	8.9	5.6	5.9	2.0	1.9	3.0	6.0	.....
29	3.8	.....	5.5	16.2	9.1	5.3	5.6	1.9	1.8	3.0	5.5	.....
30	4.75	.....	5.3	14.25	9.6	5.6	5.85	1.9	1.7	2.9	5.15	.....
31	.....	.....	5.15	.....	11.9	.....	7.2	1.9	.....	2.9	.....	*5.4

Gage heights Dec. 8, 9 and 10, were affected by ice conditions.
* Dec. 25 and 31 gage heights are to top of ice.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	.....	6.95	19.7	4.3	4.8	10.75
2	.....	6.85	19.3	4.25	5.25	9.1
3	.....	7.5	18.25	4.2	7.0	8.25
4	.....	7.35	17.35	4.1	11.1	8.15
5	.....	6.15	16.3	4.1	8.05	9.65
6	.....	6.3	14.95	4.0	7.05	8.7
7	.....	6.2	13.35	4.0	7.35	7.15
8	6.3	6.2	11.75	3.9	10.9	6.5
9	6.5	6.1	10.05	3.9	11.45	6.1
10	6.65	5.8	9.15	3.8	10.05	5.85
11	6.85	5.35	8.4	3.8	9.5	5.8
12	8.35	4.95	8.0	3.8	13.8	5.5
13	10.5	4.9	7.35	3.7	15.25	5.15
14	12.65	4.9	7.0	3.7	13.05	5.0
15	15.0	4.9	6.6	3.7	10.8	4.95
16	14.25	4.8	6.25	4.0	9.35	4.85
17	13.0	4.8	6.05	5.9	8.8	4.65
18	13.45	4.8	5.85	7.0	8.15	4.4
19	17.1	4.8	5.65	7.05	7.55	4.1
20	17.5	4.8	5.45	6.25	7.05	4.2
21	16.65	5.75	5.35	5.45	7.15	4.3
22	16.3	5.55	5.25	4.8	12.8	4.4
23	16.2	5.35	5.1	4.6	15.05	4.5
24	14.55	5.25	5.0	4.5	16.95	4.6
25	13.45	5.15	4.95	4.45	18.55	3.4
26	11.5	5.5	4.8	6.5	18.3	3.95
27	9.9	15.8	4.7	5.75	17.25	6.0
28	8.8	18.2	4.6	5.2	16.05	4.75
29	8.1	.....	4.55	4.95	14.15	4.05
30	7.75	.....	4.5	4.85	14.8	5.0
31	7.3	.....	4.4	.....	13.8	.....

Gage heights Jan. 1-7, were affected by ice conditions; Jan. 9 and 10 were obtained by interpolation.

Kaskaskia River.

Daily Discharge of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	6220	1640	3090	1340	385	99	59	24	15	42
2	.....	.....	6120	3230	2780	1370	340	88	50	24	15	35
3	.....	.....	6020	3780	2600	1200	362	78	35	29	15	35
4	.....	.....	5920	3320	4100	1070	340	59	29	29	15	29
5	.....	.....	5720	2560	5670	1070	296	50	24	29	15	29
6	.....	.....	5820	2520	7720	1140	296	59	24	24	15	29
7	.....	.....	6020	2480	7370	1070	276	68	24	24	15	29
8	.....	.....	5820	3410	7520	1010	296	78	19	19	12	35
9	.....	.....	6120	4630	7070	788	479	42	19	18	12	42
10	.....	.....	6520	4920	6720	844	455	42	24	17	12	42
11	.....	.....	6570	4250	6370	984	385	35	24	16	15	42
12	.....	.....	6320	3320	6170	900	318	29	19	15	15	42
13	.....	.....	5970	2600	6170	928	276	42	19	15	15	42
14	.....	.....	5620	2270	5970	844	236	59	24	15	15	35
15	.....	.....	5270	2110	5770	678	216	59	24	15	15	35
16	.....	.....	4440	1950	5670	678	216	78	24	15	15	35
17	.....	.....	3550	1640	5620	575	256	99	24	15	19	35
18	.....	.....	2910	1560	5520	527	340	122	19	15	24	35
19	.....	.....	2350	1640	5370	503	296	88	19	15	24	35
20	.....	.....	2190	1670	5120	575	296	78	24	15	29	35
21	.....	.....	2030	1450	4630	1070	296	59	12	15	29	35
22	.....	.....	1870	1170	4580	788	340	50	12	15	29	29
23	.....	.....	1830	1040	5420	625	216	42	19	15	29	29
24	.....	.....	1830	2310	5520	527	180	35	19	15	29	29
25	.....	.....	1790	4680	5070	431	164	29	15	15	29	29
26	.....	6320	1640	5220	4340	408	149	29	15	15	35	29
27	.....	6870	1480	5270	3280	385	135	24	19	15	35	29
28	.....	7020	1410	5220	2600	318	135	24	19	15	42	24
29	.....	6620	1340	4820	2190	276	122	24	24	15	42	24
30	.....	.....	1270	3690	1950	479	122	29	24	15	42	24
31	.....	.....	1230	.....	1710	.....	99	35	.....	15	.....	24
Total.	.....	26830	123210	90370	153680	23401	8318	1708	705	553	668	1023

Discharge Oct. 9, 10 and 11 was obtained by interpolation

Kaskaskia River.

Daily Discharge of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	35	340	3620	600	3300	3780	844	1150	50	35	164	600
2	42	135	3020	563	2780	3740	625	678	50	35	149	575
3	42	142	2370	527	2390	3990	527	539	50	35	149	575
4	35	149	2090	503	2210	4200	455	455	50	35	135	551
5	35	122	1950	479	2070	4530	408	396	50	35	135	539
6	35	999	1750	2500	1950	4580	956	351	50	29	128	479
7	35	1710	1520	5970	1730	3530	2600	307	50	29	122	455
8	35	858	1390	7220	1600	2800	4150	266	50	29	503	400
9	35	788	4170	6520	2930	2270	4920	246	128	29	351	380
10	29	1910	5500	5820	4560	2150	5320	207	385	26	296	360
11	29	1770	5670	5370	5400	2930	5620	180	149	24	246	479
12	29	928	3940	4870	4750	2350	5920	164	110	24	600	816
13	29	575	2250	6270	4040	3620	6070	156	88	24	2230	2480
14	29	1070	1690	7570	4010	4390	6320	142	73	24	1600	3050
15	29	3850	1460	6970	3390	3090	6220	135	59	29	732	2310
16	29	3580	1300	6420	2690	1970	5620	122	50	35	1040	1970
17	35	1540	1170	6240	2210	3580	4970	122	50	35	3020	1870
18	35	1410	1040	6040	1810	4700	4080	110	42	35	2050	1810
19	46	2910	956	5870	1540	3600	3580	110	42	122	1410	1710
20	94	4900	900	5820	1320	1450	3410	99	88	408	1100	1520
21	172	5520	872	6000	1140	1120	3320	88	246	329	942	1200
22	180	5570	830	6300	1030	956	2890	78	351	296	1480	1200
23	180	5500	746	6340	914	816	2310	78	431	340	2630	1000
24	149	5600	718	6120	872	788	1810	73	236	443	2850	800
25	128	5720	1070	5920	942	692	1600	68	128	396	2310	500
26	116	5540	1280	5740	1790	732	1140	68	73	172	1520	500
27	110	5070	1070	5520	1850	858	1040	59	64	207	1150	500
28	104	4290	830	5400	1910	788	872	59	50	180	900	400
29	340	.....	760	5220	1990	705	788	50	42	180	760	400
30	563	.....	705	4270	2190	788	858	50	35	164	664	400
31	452	.....	664	.....	3180	.....	1270	50	.....	164	.....	400
Total.	3236	72496	57301	149022	74488	75493	90513	6656	3320	3948	31366	30229

Discharge Dec. 8-10, Dec. 21-23 was estimated from the gage heights, climatological and other data
Year period, 598068.

Kaskaskia River.

Daily Discharge of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	400	1180	6970	455	575	2670
2	500	1150	6770	443	692	1990
3	600	1370	6240	431	1200	1660
4	700	1320	5800	408	2820	1620
5	800	942	5270	408	1580	2210
6	900	984	4610	385	1220	1830
7	940	956	3850	385	1320	1250
8	984	956	3120	362	2740	1040
9	1040	928	2370	362	2980	928
10	1090	844	2010	340	2800	858
11	1150	718	1710	340	2150	844
12	1690	612	1560	340	4060	760
13	2560	600	1320	318	4750	664
14	3530	600	1200	318	3710	625
15	4630	600	1070	318	2690	612
16	4270	575	970	385	2090	588
17	3690	575	914	872	1870	539
18	3900	575	858	1200	1620	479
19	5670	575	802	1220	1390	408
20	5870	575	746	970	1220	431
21	5440	830	718	746	1250	455
22	5270	774	692	575	3600	479
23	5220	718	651	527	4650	503
24	4410	692	625	503	5600	527
25	3900	664	612	491	6400	256
26	3000	760	575	1040	6270	374
27	2310	5020	551	830	5740	900
28	1870	6220	527	678	5140	563
29	1600	.....	515	612	4220	396
30	1460	.....	503	588	4530	625
31	1300	.....	479	.....	4060	.....
Total	80694	32313	64608	16850	94937	27084

Discharge Jan. 1-7; was estimated from climatological and other data.

Kaskaskia River.

Rating Table for Kaskaskia River at Vandalia, Ill.

1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.60	..	5.90	872	10.70	2648	15.50	4870
1.10	..	6.00	900	10.80	2692	15.60	4920
1.20	12	6.10	928	10.90	2736	15.70	4970
1.30	15	6.20	956	11.00	2780	15.80	5020
1.40	19	6.30	984	11.10	2824	15.90	5070
1.50	24	6.40	1014	11.20	2868	16.00	5120
1.60	29	6.50	1044	11.30	2912	16.10	5170
1.70	35	6.60	1074	11.40	2956	16.20	5220
1.80	42	6.70	1104	11.50	3000	16.30	5270
1.90	50	6.80	1136	11.60	3046	16.40	5320
2.00	59	6.90	1168	11.70	3092	16.50	5370
2.10	68	7.00	1200	11.80	3138	16.60	5420
2.20	78	7.10	1234	11.90	3184	16.70	5470
2.30	88	7.20	1268	12.00	3230	16.80	5520
2.40	99	7.30	1302	12.10	3276	16.90	5570
2.50	110	7.40	1338	12.20	3322	17.00	5620
2.60	122	7.50	1374	12.30	3368	17.10	5670
2.70	135	7.60	1410	12.40	3414	17.20	5720
2.80	149	7.70	1446	12.50	3460	17.30	5770
2.90	164	7.80	1484	12.60	3506	17.40	5820
3.00	180	7.90	1522	12.70	3552	17.50	5870
3.10	198	8.00	1560	12.80	3598	17.60	5920
3.20	216	8.10	1598	12.90	3644	17.70	5970
3.30	236	8.20	1636	13.00	3690	17.80	6020
3.40	256	8.30	1674	13.10	3736	17.90	6070
3.50	276	8.40	1712	13.20	3782	18.00	6120
3.60	296	8.50	1750	13.30	3828	18.10	6170
3.70	318	8.60	1790	13.40	3874	18.20	6220
3.80	340	8.70	1830	13.50	3920	18.30	6270
3.90	362	8.80	1870	13.60	3966	18.40	6320
4.00	385	8.90	1910	13.70	4012	18.50	6370
4.10	408	9.00	1950	13.80	4058	18.60	6420
4.20	431	9.10	1990	13.90	4104	18.70	6470
4.30	455	9.20	2030	14.00	4150	18.80	6520
4.40	479	9.30	2070	14.10	4198	18.90	6570
4.50	503	9.40	2110	14.20	4246	19.00	6620
4.60	527	9.50	2150	14.30	4294	19.10	6670
4.70	551	9.60	2190	14.40	4342	19.20	6720
4.80	575	9.70	2230	14.50	4390	19.30	6770
4.90	600	9.80	2270	14.60	4438	19.40	6820
5.00	625	9.90	2310	14.70	4486	19.50	6870
5.10	651	10.00	2350	14.80	4534	19.60	6920
5.20	678	10.10	2392	14.90	4582	19.70	6970
5.30	705	10.20	2434	15.00	4630	19.80	7020
5.40	732	10.30	2476	15.10	4678	19.90	7070
5.50	760	10.40	2518	15.20	4726	20.00	7120
5.60	788	10.50	2560	15.30	4774	21.00	7620
5.70	816	10.60	2604	15.40	4822	22.00	8120
5.80	844						

Note—The above table is not applicable for ice or obstructed channel conditions. It is based on 15 discharge measurements made during 1908-1910 and is well defined between gage heights 2.3 feet and 14.0 feet. Above gage height 15.5 feet the rating curve is tangent, the difference being 50 per tenth.

Kaskaskia River.

Monthly Discharge of Kaskaskia River at Vandalia, Ill., for 1908 to 1910.

(Drainage Area 1980 Square Miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
March	6570	1230	3970	2.01	2.32	B
April	5270	1040	3010	1.52	1.70	B
May	7720	1710	4960	2.51	2.89	B
June	1370	276	780	.394	.44	A
July	479	99	268	.135	.16	A
August	122	24	55.1	.028	.03	B
September	59	12	23.5	.012	.01	C
October	29	15	17.8	.0090	.01	C
November	42	15	22.3	.011	.01	C
December	42	24	33.0	.017	.02	B
1909						
January	563	29	104	.052	.06	B
February	5720	122	2590	1.31	1.36	A
March	5670	664	1850	.934	1.08	A
April	7570	479	4970	2.51	2.80	B
May	5400	872	2400	1.21	1.40	A
June	4700	692	2520	1.27	1.42	A
July	6320	408	2920	1.47	1.70	A
August	1150	50	215	.109	.13	B
September	431	35	111	.056	.06	B
October	443	24	127	.064	.07	B
November	3020	122	1050	.530	.60	A
December	3050	.....	975	.492	.57	C
The year	7570	.....	1650	.834	11.25	
1910						
January	5870	.....	2600	1.31	1.51	C
February	6220	575	1150	.581	.60	A
March	6970	479	2080	1.05	1.21	B
April	1220	318	562	.284	.32	A
May	6400	575	3060	1.55	1.79	A
June	2670	256	903	.456	.51	A

Kaskaskia River at Carlyle, Ill.

This station is located at the B. & O. S. W. Railroad bridge, about one-fourth mile east of the railroad station at Carlyle, Ill. It was established March 2, 1908, for the purpose of obtaining data for use in studying drainage, flood control, and water supply problems, and to obtain general statistical and comparative data.

There are no tributaries of any size for ten miles above and below this station. Shoal creek is tributary on the right bank about fifteen miles below the station. The drainage area above the gaging station is about 2,680 square miles.

The intake of the water supply system of Carlyle is above the gaging station. There is a dam about 3½ feet high about 700 feet above the section which is used for water supply purposes. The average amount of water pumped is about 3,500,000 gallons every thirty days, and during June, July and August the quantity is about 4,500,000 gallons every

thirty days. The outfalls of one section of the city sewerage system and some private sewers are above the gaging station, so the diversion is small.

The datum of the gage has remained unchanged since its installation; the records are accurate and reliable. The flood of 1882, which is the highest known, is said to have reached a height of 14.2 feet higher than the flood of 1908, or about 32.5 feet on the present gage. The stream never goes dry at this point. It has been noticed during periods of low water that the water is hard, which fact indicates that the flow is kept up by springs.

Kaskaskia River.

Discharge Measurements of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
March 23	R. J. Taylor	196	1769	1.60	16.7	2828
May 4	R. J. Taylor	511.5	3768	1.42	21.35	5358
July 8	R. J. Taylor	131	335	1.27	8.1	426
August 7	R. J. Taylor	124	239	1.21	7.1	289
September 24	R. J. Taylor				*5.6	62
October 22	R. J. Taylor				*5.6	32
1909						
February 22	R. J. Taylor	514	3663	1.29	20.70	4714
March 15	Wm. M. O'Neill	531	4485	1.59	22.29	7111
March 25	Wm. M. O'Neill	149	773	1.63	10.86	1259
May 7	H. J. Jackson	177	1538	1.72	15.36	2645
October 28	H. J. Jackson	129	276	1.43	7.32	395
November 18	H. J. Jackson	228	2081	1.86	17.77	3871
November 19	H. J. Jackson	229	2119	1.84	17.84	3881
December 2	H. J. Jackson	142	595	1.58	9.63	939
December 4	H. J. Jackson	139	520	1.54	9.11	801
1910						
March 25	H. J. Jackson	139	531	1.54	9.24	818
May 20	C. F. Bailey	158	1020	1.80	12.70	1840
May 27	C. F. Bailey	522	3510	1.34	20.52	4710
May 29	C. F. Bailey	526	3910	1.36	21.17	5310
June 2	C. F. Bailey	526	4040	1.52	21.76	6150
June 6	C. F. Bailey	198	2150	1.81	18.92	3890
June 7	C. F. Bailey	198	1900	1.74	17.66	3310
June 8	C. F. Bailey	166	1160	1.67	13.63	1940

* Partly estimated.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	13.9	22.2	19.1	8.0	7.5	6.1	5.6	5.6	5.6
2	.....	.....	23.7	16.1	22.1	15.6	8.2	7.3	6.0	5.6	5.6	5.6
3	.....	.....	23.6	17.6	21.8	13.3	8.2	7.0	6.0	5.6	5.6	5.9
4	.....	.....	23.3	18.2	21.3	12.5	8.1	6.8	5.9	5.6	5.6	5.9
5	.....	.....	23.1	18.5	21.8	11.9	8.0	6.7	5.8	5.6	5.6	5.9
6	.....	.....	22.9	18.4	23.1	11.6	8.1	7.1	5.8	5.6	5.6	5.9
7	.....	.....	22.8	18.0	24.9	11.7	8.1	7.1	5.9	5.6	5.6	5.9
8	.....	.....	22.8	18.0	29.1	11.2	8.0	7.2	5.9	5.6	5.6	5.9
9	.....	.....	22.8	19.0	30.8	11.1	8.0	6.9	5.8	5.6	5.6	5.7
10	.....	.....	23.1	19.9	30.0	11.9	7.7	6.7	5.9	5.6	5.6	5.7
11	.....	.....	23.6	20.7	28.8	11.0	8.5	6.7	5.7	5.6	5.6	5.7
12	.....	.....	23.7	21.2	27.3	10.6	8.2	6.5	5.7	5.6	5.6	5.7
13	.....	.....	23.4	21.5	26.3	10.6	8.0	6.6	5.7	5.6	5.6	5.7
14	.....	.....	23.3	21.5	25.5	10.5	8.0	6.6	5.7	5.6	5.6	5.7
15	.....	.....	23.0	21.3	24.9	10.4	7.8	6.5	5.7	5.6	5.6	5.7
16	.....	.....	22.7	20.5	24.4	9.8	7.6	6.5	5.6	5.6	5.6	5.7
17	.....	.....	22.4	19.1	24.0	9.7	7.7	6.5	5.7	5.6	5.6	5.7
18	.....	.....	22.2	17.1	23.6	9.4	7.9	6.4	5.7	5.6	5.6	5.7
19	.....	.....	21.9	15.9	23.3	9.1	7.8	6.4	5.6	5.6	5.6	5.7
20	.....	.....	21.6	14.8	23.0	8.9	8.2	6.4	5.7	5.6	5.6	5.7
21	.....	.....	20.8	14.0	22.7	9.3	8.1	6.3	5.7	5.6	5.6	5.7
22	.....	.....	18.3	12.8	23.1	10.3	8.6	6.1	5.6	5.6	5.6	5.6
23	.....	.....	16.6	12.3	22.9	10.3	9.3	6.0	5.7	5.6	5.6	5.6
24	.....	.....	14.9	15.4	22.7	9.3	9.2	6.0	5.7	5.6	5.6	5.6
25	.....	.....	13.6	18.1	22.5	9.0	8.3	5.9	5.6	5.6	5.6	5.6
26	.....	.....	13.1	19.9	22.2	8.6	8.5	5.9	5.6	5.6	5.6	5.6
27	.....	.....	12.6	21.2	22.0	8.5	9.4	5.9	5.6	5.6	5.6	5.6
28	.....	.....	12.3	21.7	21.9	8.4	9.3	5.9	5.6	5.6	5.6	5.6
29	.....	.....	12.7	22.0	21.8	8.5	8.2	6.1	5.6	5.6	5.6	5.6
30	.....	.....	12.8	22.2	21.8	8.3	8.0	6.5	5.6	5.6	5.6	5.6
31	.....	.....	12.9	.....	20.6	.....	7.6	6.5	.....	5.6	.....	5.6

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.6	7.0	21.4	9.9	22.2	15.3	9.7	10.3	5.75	5.85	6 6	10.0
2	5.6	7.2	21.3	9 9	22.1	17.2	9.3	11.8	5.75	5.7	6.5	9.65
3	5.6	7.5	20.9	9.2	22.0	17.6	8.8	10.3	5.75	5.7	6.45	9.3
4	5.6	7.5	20.7	9.4	21.5	18.7	8.6	8.9	5.7	5.7	6.45	9.05
5	5.6	7.5	20.2	9.4	21.2	19.3	8.1	8.4	5.7	5.65	6.5	8.9
6	5.6	8.7	19.9	9.9	21.0	19.5	8.5	8.1	5.7	5.6	6.55	8.75
7	5.6	9.1	19.9	12.8	15.5	19.8	12.0	7.8	5.7	5.6	7.6	8.8
8	5.6	9.4	20.4	17.2	13.8	19.9	15.0	7.5	5.7	5.6	6.95	8.8
9	5.6	10.4	20.8	18.5	14.6	19.8	17.0	7.4	5.7	5.55	10.0	8.65
10	5.6	10.7	21.2	19.3	16.8	18.6	18.0	7.3	5.7	5 55	10 95	7.95
11	5.6	11.1	21.9	19.8	18.4	16.2	18.6	7.1	10.3	5.55	8 9	8.75
12	5.7	12.1	22.9	20.0	19.0	15.6	19.1	7.0	8.8	5.5	8 5	13.5
13	5.7	12.3	22.9	23.2	19.6	16.0	19.7	6.9	7.1	5.5	9 8	18.6
14	5.7	12.7	19.9	24.3	20.0	16.5	20.1	6.8	6.4	5.4	12 2	18.95
15	5.7	13.4	18.0	25.0	20.4	17.4	20.6	6.75	6.1	5.4	16 2	19.7
16	5.7	14.5	13.2	25.3	20.6	17.8	21.0	6.6	6 4	5.4	14 1	20.1
17	5.7	14.7	12.5	25.4	20.9	16.6	21.3	6.5	6 6	5.9	15.45	19.6
18	5.7	15.1	12.0	25.4	20.9	15.5	21 6	6.4	6 1	6.1	17.7	17 45
19	5.7	16.9	11.9	25.0	18.6	17.3	21.9	6.35	6.0	7.4	18 0	14.85
20	5.7	19.0	11.8	24.2	15.0	17.8	22 0	6.3	5.8	9.6	14 65	11.45
21	5.7	19.4	11.8	24.1	12.7	16.6	22.0	6.2	5.85	9.4	12.0	13.7
22	5.9	19.8	11.5	24.1	11.8	12.6	21.8	6.15	5.9	8.9	11 65	13.05
23	5.9	20.4	11.2	24.1	11.0	10.8	21.4	6.1	8 0	8 3	14.9	12.7
24	5.9	20.7	11.2	24.1	10.6	10.0	20.6	6.1	8.9	8.4	18 4	12.7
25	6.1	21.2	11.2	24.1	10.2	9.8	18.6	6 0	8 0	8 4	19 1	12.6
26	6.1	21.4	11.3	24.0	11 0	9 4	15 0	6 0	7.2	8 3	19.0	11.9
27	6.3	21.9	11.3	24.0	12.3	9.5	12.7	6 0	6.4	7.7	16.25	10 85
28	6.6	21.9	11 0	23.8	13.2	9 8	11 5	5 95	6 1	7 2	13 6	10.7
29	6.6	.....	10.7	23.6	13.3	10.0	10.5	5 9	6.0	6.9	11 2	9 95
30	6.7	.....	10 6	23 0	13.6	9 9	9.9	5 85	5.9	6 7	10 5	9.65
31	6.8	.....	10 2	.....	13.9	.....	9.6	5 75	.....	6 6	.....	9.65

Gage heights Dec. 8-10, 23-24 were affected by ice conditions.
Gage heights Dec. 25-31 are to top of ice.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	9.6	13.7	22.1	8.3	9.2	21.8
2	10.0	12.5	23.8	8.2	8.9	21.7
3	10.3	12.0	24.8	8.1	8.7	21.5
4	10.7	12.7	24.5	8.0	10.0	20.6
5	11.4	13.7	24.1	8.1	11.3	19.7
6	11.6	12.8	23.6	8.2	12.4	18.9
7	12.3	11.9	23.0	8.3	12.2	17.0
8	12.4	11.2	22.6	8.3	13.5	13.9
9	10.5	10.7	22.2	8.1	15.0	12.4
10	11.5	10.5	17.3	7.9	16.3	11.3
11	11.0	10.3	16.1	7.8	16.0	10.7
12	10.9	10.0	14.8	7.7	15.0	10.2
13	16.0	9.8	13.2	7.6	17.1	9.8
14	19.4	9.6	13.0	7.5	18.2	9.4
15	20.4	9.4	12.2	7.5	18.4	9.2
16	21.0	9.5	11.5	8.7	18.6	9.0
17	21.5	9.9	11.0	10.1	17.1	8.8
18	21.6	10.4	10.6	11.4	15.7	8.6
19	21.8	11.1	10.3	11.2	13.5	8.4
20	21.9	10.5	10.1	10.7	12.6	8.2
21	22.0	10.2	10.0	9.8	11.8	8.0
22	22.1	10.6	9.7	9.3	13.7	7.9
23	22.0	11.8	9.6	8.9	18.0	7.8
24	21.9	13.5	9.5	8.7	19.0	7.75
25	21.8	13.6	9.25	8.5	19.6	7.5
26	21.6	12.2	9.2	8.4	20.2	7.4
27	21.5	16.1	9.05	8.5	20.6	7.8
28	21.4	20.9	8.9	9.2	20.9	8.4
29	20.9	.....	8.7	9.9	21.3	10.8
30	17.8	.....	8.6	9.6	21.6	9.6
31	15.7	.....	8.4	.....	21.9	.....

Kaskaskia River.

Daily Discharge of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.
1	.....	.....	.....	2120	6870	3840	515	394	116	47	47	47
2	.....	.....	9150	2790	6720	2640	565	346	100	47	47	47
3	.....	.....	9000	3290	6270	1940	565	280	100	47	47	86
4	.....	.....	8550	3500	5510	1710	540	240	86	47	47	86
5	.....	.....	8240	3610	6270	1540	515	220	72	47	47	86
6	.....	.....	7940	3570	8240	1460	540	302	72	47	47	86
7	.....	.....	7790	3430	11000	1490	540	302	86	47	47	86
8	.....	.....	7790	3430	17400	1350	515	324	86	47	47	86
9	.....	.....	7790	3800	19900	1330	515	260	72	47	47	59
10	.....	.....	8240	4220	18700	1540	442	220	86	47	47	59
11	.....	.....	9000	4750	16900	1300	640	220	59	47	47	59
12	.....	.....	9150	5360	14600	1190	565	184	59	47	47	59
13	.....	.....	8700	5810	13100	1190	515	202	59	47	47	59
14	.....	.....	8550	5810	11900	1160	515	202	59	47	47	59
15	.....	.....	8090	5510	11000	1140	466	184	59	47	47	59
16	.....	.....	7630	4580	10200	978	418	184	47	47	47	59
17	.....	.....	7180	3840	9610	952	442	184	59	47	47	59
18	.....	.....	6870	3110	9000	874	490	166	59	47	47	59
19	.....	.....	6420	2730	8550	796	466	166	47	47	47	59
20	.....	.....	5960	2390	8090	744	565	166	59	47	47	59
21	.....	.....	4850	2140	7630	848	540	148	59	47	47	59
22	.....	.....	3540	1790	8240	1110	666	146	47	47	47	47
23	.....	.....	2950	1650	7940	1110	848	100	59	47	47	47
24	.....	.....	2420	2570	7630	848	822	100	59	47	47	47
25	.....	.....	2020	3470	7330	770	590	86	47	47	47	47
26	.....	.....	1880	4220	6870	666	640	86	47	47	47	47
27	.....	.....	1740	5360	6570	640	874	86	47	47	47	47
28	.....	.....	1650	6110	6420	615	848	86	47	47	47	47
29	.....	.....	1770	6570	6270	640	565	116	47	47	47	47
30	.....	.....	1790	6870	6270	590	575	184	47	47	47	47
31	.....	.....	1820	.....	4660	.....	418	184	.....	47	.....	47
Total.	.....	.....	178170	118400	296440	37001	17660	6048	1908	1457	1410	1817

Kaskaskia River.

Daily Discharge of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	47	280	5660	1000	6870	2540	952	1110	66	79	202	1030
2.....	47	324	5510	822	6720	3150	848	1520	66	59	184	939
3.....	47	394	4970	822	6570	3290	718	1110	66	59	175	848
4.....	47	394	4750	874	5810	3690	666	744	59	59	175	783
5.....	47	394	4380	874	5360	3930	540	615	59	53	184	744
6.....	47	692	4220	1000	5090	4020	640	540	59	47	193	705
7.....	47	796	4220	1790	2600	4160	1570	466	59	47	418	718
8.....	47	874	4510	3150	2080	4220	2450	394	59	47	270	600
9.....	47	1140	4850	3610	2330	4160	3080	370	59	41	1030	600
10.....	47	1220	5360	3930	3020	3650	3430	346	59	41	1290	500
11.....	47	1330	6420	4160	3570	2820	3650	302	1110	41	744	705
12.....	59	1600	7940	4270	3800	2640	3840	280	718	35	640	2000
13.....	59	1650	7940	8390	4060	2760	4110	260	302	35	978	3650
14.....	59	1770	4220	10100	4270	2920	4330	240	166	23	1630	3780
15.....	59	1970	3430	11100	4510	3220	4660	230	116	23	2820	4110
16.....	59	2300	1910	11600	4660	3360	5090	202	166	23	2180	4330
17.....	59	2360	1710	11700	4970	2950	5510	184	202	86	2590	4060
18.....	59	2480	1570	11700	4970	2600	5960	166	166	116	3320	3230
19.....	59	3050	1540	11100	3650	3180	6420	157	100	370	3430	3400
20.....	59	3800	1520	9910	2450	3360	6570	148	72	926	2340	2280
21.....	59	3970	1520	9760	1770	2950	6570	132	79	874	1570	2060
22.....	86	4160	1440	9760	1520	1740	6270	124	86	744	1480	1860
23.....	86	4510	1350	9760	1300	1250	5660	116	515	590	2420	1600
24.....	86	4750	1350	9760	1190	1030	4660	116	744	615	3570	1450
25.....	116	5360	1350	9760	1080	978	3650	100	515	615	3840	1300
26.....	116	5660	1380	9610	1300	874	2450	100	324	590	3800	1200
27.....	148	6420	1380	9610	1650	900	1770	100	166	442	2840	1100
28.....	202	6420	1300	9310	1910	978	1440	93	116	324	2020	950
29.....	202	.....	1220	9000	1940	1030	1170	86	100	260	1350	800
30.....	220	.....	1190	8090	2020	1000	1000	79	86	220	1160	700
31.....	240	.....	1080	.....	2120	.....	926	66	.....	202	.....	700
Total	2609	70068	101190	206322	105160	79350	100600	10496	6460	7686	48843	51732

Year period 79056. Discharge Dec. 8-10, 23-31 was estimated from the gage heights, climatological and other data.

Kaskaskia River.

Daily Discharge of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	926	2060	6720	590	822	6270
2	1030	1710	9310	565	744	6110
3	1110	1570	10800	540	692	5810
4	1220	1770	10400	515	1030	4660
5	1410	2060	9760	540	1380	4110
6	1460	1790	9000	565	1680	3760
7	1650	1540	8090	590	1630	3080
8	1680	1350	7480	590	2000	2120
9	1160	1220	6870	540	2450	1680
10	1440	1160	3180	490	2860	1380
11	1300	1110	2790	466	2760	1220
12	1270	1030	2390	442	2450	1080
13	2760	978	1910	418	3110	978
14	3970	926	1850	394	3500	874
15	4510	874	1630	394	3570	822
16	5090	900	1440	692	3650	770
17	5810	1000	1300	1060	3110	718
18	5960	1140	1190	1410	2670	666
19	6270	1330	1110	1350	2000	615
20	6420	1160	1060	1220	1740	565
21	6570	1080	1030	978	1520	515
22	6720	1190	952	848	2060	490
23	6570	1520	926	744	3430	466
24	6420	2000	900	692	3800	454
25	6270	2020	835	640	4060	394
26	5960	1630	822	615	4380	370
27	5810	2790	783	640	4660	466
28	5660	4970	744	822	4970	615
29	4970	.....	692	1000	5510	1250
30	3360	.....	666	926	5960	926
31	2670	.....	615	.....	6420	.....
Total	117426	43878	107245	21276	90618	53234

Kaskaskia River.

Rating Table for Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
5.00	..	10.20	1084	15.40	2574	20.60	4660
5.10	..	10.30	1111	15.50	2605	20.70	4750
5.20	..	10.40	1138	15.60	2636	20.80	4852
5.30	..	10.50	1165	15.70	2667	20.90	4966
5.40	..	10.60	1192	15.80	2698	21.00	5090
5.50	..	10.70	1219	15.90	2729	21.10	5222
5.60	47	10.80	1246	16.00	2760	21.20	5362
5.70	59	10.90	1273	16.10	2792	21.30	5512
5.80	72	11.00	1300	16.20	2824	21.40	5662
5.90	86	11.10	1327	16.30	2856	21.50	5812
6.00	100	11.20	1354	16.40	2888	21.60	5962
6.10	116	11.30	1381	16.50	2920	21.70	6114
6.20	132	11.40	1408	16.60	2952	21.80	6266
6.30	148	11.50	1435	16.70	2984	21.90	6418
6.40	166	11.60	1462	16.80	3016	22.00	6570
6.50	184	11.70	1489	16.90	3048	22.10	6722
6.60	202	11.80	1516	17.00	3080	22.20	6874
6.70	220	11.90	1543	17.10	3114	22.30	7026
6.80	240	12.00	1570	17.20	3148	22.40	7178
6.90	260	12.10	1598	17.30	3182	22.50	7330
7.00	280	12.20	1626	17.40	3216	22.60	7482
7.10	302	12.30	1654	17.50	3250	22.70	7634
7.20	324	12.40	1682	17.60	3286	22.80	7786
7.30	346	12.50	1710	17.70	3322	22.90	7938
7.40	370	12.60	1738	17.80	3358	23.00	8090
7.50	394	12.70	1766	17.90	3391	23.10	8242
7.60	418	12.80	1794	18.00	3430	23.20	8394
7.70	442	12.90	1822	18.10	3466	23.30	8546
7.80	466	13.00	1850	18.20	3502	23.40	8698
7.90	490	13.10	1879	18.30	3538	23.50	8850
8.00	515	13.20	1908	18.40	3574	23.60	9002
8.10	540	13.30	1937	18.50	3610	23.70	9154
8.20	565	13.40	1966	18.60	3648	23.80	9306
8.30	590	13.50	1995	18.70	3686	23.90	9458
8.40	615	13.60	2025	18.80	3724	24.00	9610
8.50	640	13.70	2055	18.90	3762	24.10	9762
8.60	666	13.80	2085	19.00	3800	24.20	9914
8.70	692	13.90	2115	19.10	3840	24.30	10066
8.80	718	14.00	2145	19.20	3882	24.40	10218
8.90	744	14.10	2175	19.30	3926	24.50	10370
9.00	770	14.20	2205	19.40	3970	24.60	10522
9.10	796	14.30	2235	19.50	4016	24.70	10674
9.20	822	14.40	2265	19.60	4064	24.80	10826
9.30	848	14.50	2295	19.70	4114	24.90	10978
9.40	874	14.60	2326	19.80	4164	25.00	11130
9.50	900	14.70	2357	19.90	4216	26.00	13650
9.60	926	14.80	2388	20.00	4270	27.00	14170
9.70	952	14.90	2419	20.10	4326	28.00	15690
9.80	978	15.00	2450	20.20	4384	29.00	17210
9.90	1004	15.10	2481	20.30	4446	30.00	18730
10.00	1030	15.20	2512	20.40	4512	31.00	20250
10.10	1057	15.30	2543	20.50	4580		

The above table is not applicable for ice or obstructed channel conditions. It is based on 23 discharge measurements made during 1908–1910 and is well defined between gage heights 7.0 feet and 22.3 feet. Above gage height 21.6 feet the rating curve is a tangent, the difference being 152 per tenth.

Kaskaskia River.

Monthly Discharge of Kaskaskia River at Carlyle, Ill., for 1908 to 1910.

Month.	Discharge in second-feet.			Run-off.		
	Maximum.	Minimum.	Feet.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
January						
February						
March 1-30	9150	1650	5959	2.22	2.48	B
April	6870	1650	3950	1.47	1.64	A
May	19900	1669	9550	3.56	4.10	A
June	3840	590	1230	.459	.51	A
July	874	418	570	.213	.25	A
August	394	86	195	.073	.08	A
September	116	47	64.9	.024	.03	B
October	47	47	47	.018	.02	B
November	47	47	47	.018	.02	B
December	86	47	59.6	.022	.05	B
The year						
1909						
January	240	47	84.2	.031	.01	B
February	6420	280	2500	.933	.97	A
March	7940	1080	3260	1.22	1.41	A
April	11700	822	6880	2.57	2.87	B
May	6870	1080	3390	1.27	1.43	A
June	4220	874	2640	0.985	1.16	A
July	6550	540	3250	1.21	1.40	A
August	1520	66	339	.127	.15	B
September	1110	59	215	.080	.09	B
October	926	23	248	.093	.11	B
November	3810	175	1630	.608	.68	A
December	1330		1670	.623	.72	C
The year	11700		2180	.812	11.07	
1910						
January	6720	926	3790	1.41	1.63	B
February	1970	874	1570	.586	.61	A
March	10800	615	3160	1.29	1.49	A
April	1410	491	709	.265	.30	A
May	6420	662	2920	1.09	1.26	A
June	6270	370	1770	.661	.74	A

Kaskaskia River at New Athens, Ill.

This station is located at the I. C. Railroad bridge, about 600 feet north of the I. C. Railroad station at New Athens, Ill., and about 600 feet up-stream from the highway bridge. It was established Nov. 1, 1909, for the purpose of obtaining data for use in studying problems of drainage, flood control, and navigation, and to obtain general statistical and comparative data.

Silver creek is tributary on the right bank about one mile above, and Lively creek is tributary on the left bank about three miles below the gaging section. The total drainage area above the gaging station is about 5,220 square miles.

The datum of the gage has remained unchanged since its installation, and the records are accurate and reliable. The stream is fed by springs and never goes dry at this point. The flood of the fall of 1898 reached a height of about 34.5 feet on the present gage datum.

A record of river height at this point from Jan. 23, 1907, to Oct. 28, 1909, inclusive, was kept for the New Athens Journal by C. J. Von Roth Roffy. The river height was taken on Wednesday and Thursday mornings of each week, the river height for Thursday being published each Friday with the change in twenty-four hours as obtained from the river height of Wednesday. This record of stage was kept by the Journal mainly for the information of farmers living on the west side of the river, who are cut off from reaching New Athens via the highway bridge when the river reaches a stage about thirty feet. The record is authentic. These gage heights have been carefully reduced to the datum of the present gage, the maximum error is probably not over 0.4 feet., the lower the stage the greater the error.

Kaskaskia River.

Discharge Measurements of Kaskaskia River at New Athens, Ill.

1907 to 1910

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909						
November 2	H. J. Jackson	174	610	0.66	4.13	401
November 16	H. J. Jackson	239	3310	2.12	16.59	7025
November 20	H. J. Jackson	250	3664	2.14	18.02	7849
November 30	H. J. Jackson	218	1818	1.36	9.80	2468
December 1	H. J. Jackson	213	1491	1.29	8.54	1916
December 3	H. J. Jackson	208	1243	1.21	7.40	1502
1910						
March 23	H. J. Jackson	205	1220	1.15	7.48	1400
May 21	C. T. Bailey	216	1780	1.58	9.96	2820
May 21	C. T. Bailey	202	2030	1.20	*9.72	2440
May 22	C. T. Bailey	213	1580	1.43	9.18	2260
May 26	C. T. Bailey	271	4250	2.75	20.55	11700
May 30	C. T. Bailey	271	4420	2.67	21.06	11800
May 31	C. T. Bailey	261	4210	2.45	20.28	10300
June 1	C. T. Bailey	260	4090	2.34	19.77	9570
June 5	C. T. Bailey	248	3520	2.25	17.63	7930
June 7	C. T. Bailey	251	3700	2.34	18.32	8650

* Not at regular section.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1907

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	uly.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	15.5	.....	.....	13.6	.....	.....	.....	.....
2	.....	.....	.....	.....	17.5	.....	.....	.....	.....	4 0	.....	.....
3	.....	.....	.....	9.7	.....	.....	.....	.....	.....	4.0	.....	.....
4	.....	.....	.....	9.1	.....	.....	.....	.....	6.6	.....	.....	4.6
5	.....	.....	.....	.....	.....	19.1	.....	.....	6.4	.....	.....	4.4
6	.....	18.0	11.7	.....	.....	19.7	.....	.....	.....	.....	6 8	.....
7	.....	17.7	10.1	.....	.....	.....	.....	7.4	.....	.....	6 4	.....
8	.....	.....	.....	.....	11.1	.....	.....	8.7	.....	.....	.....	.....
9	.....	.....	.....	.....	12.1	.....	.....	.....	.....	9.8	.....	.....
10	.....	.....	.....	8.1	.....	.....	7.6	.....	.....	5.7	.....	.....
11	.....	.....	.....	7.9	.....	.....	6.6	.....	5 6	.....	.....	5.1
12	.....	.....	.....	.....	.....	21.5	.....	.....	5.4	.....	.....	5.3
13	.....	6 3	15.5	.....	.....	22.1	.....	.....	.....	.....	4 4	.....
14	.....	5.7	19.6	.....	.....	.....	.....	17.0	.....	.....	4 3	.....
15	.....	.....	.....	.....	14.1	.....	.....	16.0	.....	.....	.....	.....
16	.....	.....	.....	.....	17.5	.....	.....	.....	.....	4 4	.....	.....
17	.....	.....	.....	7.5	.....	.....	7.6	.....	.....	4.2	.....	.....
18	.....	.....	.....	7.1	.....	.....	7.9	.....	.....	.....	.....	6.6
19	.....	.....	.....	.....	.....	22.8	.....	.....	.....	.....	.....	7.7
20	.....	7.9	22.2	.....	.....	21 2	.....	.....	.....	.....	5.8	.....
21	.....	7.6	21.3	.....	.....	.....	.....	12 7	.....	.....	4 9	.....
22	.....	.....	.....	.....	14 1	.....	.....	15.6	.....	.....	.....	.....
23	24.3	.....	.....	.....	15.1	.....	.....	.....	.....	3.9	.....	.....
24	24.3	.....	.....	10.3	.....	.....	13.6	.....	.....	3 8	.....	.....
25	.....	.....	.....	11.6	.....	.....	15.6	.....	4.4	.....	.....	15.2
26	.....	.....	.....	.....	.....	10.1	.....	.....	4.4	.....	.....	10.7
27	.....	2.1	17.9	.....	.....	11.1	.....	.....	.....	.....	5 4	.....
28	.....	9.1	17.6	.....	.....	.....	.....	13.5	.....	.....	5 2	.....
29	.....	.....	.....	.....	10.2	.....	.....	10.8	.....	.....	.....	.....
30	21.4	.....	.....	.....	8.9	.....	.....	.....	.....	4 3	.....	.....
31	19.0	.....	.....	.....	.....	.....	15.6	.....	.....	4 4	.....	.....

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1908.

Day.	Jan	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.2	.....	.....	14.1	.....	.....	14.8	.....	.....	3.5	.....	.....
2	13.6	.....	.....	14.1	.....	.....	14.1	.....	3.8	.....	.....	5.4
3	.....	.....	.....	.....	.....	.....	.....	.....	3.8	.....	.....	4.9
4	.....	.....	24.3	.....	.....	.....	.....	.....	.....	.....	3.3	.....
5	.....	16.5	24.2	.....	.....	.....	.....	5.4	.....	.....	3.3	.....
6	.....	16.5	.....	.....	24.5	.....	.....	5.4	.....	.....	.....	.....
7	.....	.....	.....	.....	27.3	.....	.....	.....	.....	.....	.....	.....
8	12.6	.....	.....	16.5	.....	.....	14.4	.....	.....	.....	.....	.....
9	10.8	.....	.....	18.8	.....	.....	13.5	.....	3.8	.....	.....	3.9
10	.....	.....	.....	.....	.....	14.7	.....	.....	5.7	.....	.....	3.8
11	.....	.....	.....	.....	.....	15.1	.....	.....	.....	.....	3.3	.....
12	.....	20.0	.....	.....	.....	.....	.....	5.6	.....	.....	3.3	.....
13	.....	19.6	.....	.....	33.2	.....	.....	6.3	.....	.....	.....	.....
14	.....	.....	.....	.....	32.2	.....	.....	.....	.....	3.5	.....	.....
15	17.1	.....	.....	20.1	.....	.....	10.3	.....	.....	3.5	.....	.....
16	18.0	.....	.....	19.3	.....	.....	9.4	.....	3.6	.....	.....	3.6
17	.....	.....	.....	.....	.....	17.5	.....	.....	3.6	.....	.....	3.5
18	.....	.....	22.6	.....	.....	17.3	.....	.....	.....	.....	3.3	.....
19	.....	23.9	22.2	.....	.....	.....	.....	4.7	.....	.....	3.3	.....
20	.....	24.7	.....	.....	24.5	.....	.....	4.6	.....	.....	.....	.....
21	.....	.....	.....	.....	23.8	.....	.....	.....	.....	3.3	.....	.....
22	10.9	.....	.....	12.8	.....	.....	8.7	.....	.....	3.3	.....	.....
23	10.5	.....	.....	11.8	.....	.....	8.8	.....	.....	.....	.....	3.4
24	.....	.....	.....	.....	.....	17.5	.....	.....	.....	.....	.....	3.5
25	.....	.....	17.1	.....	.....	17.2	.....	.....	.....	.....	.....	.....
26	.....	24.4	14.1	.....	.....	.....	.....	4.1	.....	.....	.....	.....
27	.....	24.3	.....	.....	23.9	.....	.....	4.0	.....	.....	.....	.....
28	.....	.....	.....	.....	23.4	.....	.....	.....	.....	3.3	.....	.....
29	8.0	.....	.....	21.1	.....	.....	12.1	.....	.....	3.3	.....	.....
30	7.6	.....	.....	23.1	.....	.....	10.8	.....	3.5	.....	.....	.....
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1909

Day	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	9.1	.....	.....	11 5	.....	3.4	.....	4 35	8.6
2	.....	.....	.....	.....	.....	.....	.....	.....	3 3	.....	4 2	7.9
3	.....	7 6	21 8	.....	.....	.....	.....	.....	.....	.....	4 05	7 45
4	.....	7.2	21 2	.....	.....	.....	.....	9 7	.....	.....	4.0	7 1
5	.....	.....	.....	.....	21.3	.....	.....	7.7	.....	.....	3 95	6 8
6	3.9	.....	.....	.....	20.7	.....	.....	.....	.....	3.5	3 9	6 85
7	3.9	.....	.....	10 6	.....	.....	.....	.....	.....	3.4	4.05	7.1
8	.....	.....	.....	14 8	.....	.....	.....	.....	3 6	.....	5.2	7 4
9	.....	.....	.....	.....	.....	.....	.....	.....	3 6	.....	6 8	7 5
10	.....	.....	22 6	.....	.....	14 7	.....	.....	.....	.....	8 7	7 35
11	.....	.....	23.6	.....	.....	15.1	.....	5.5	.....	.....	10.9	6 85
12	.....	.....	.....	.....	.....	.....	.....	5.4	.....	.....	10 3	9 3
13	3.7	.....	.....	.....	.....	.....	.....	.....	.....	3 1	11 25	14 1
14	3.7	.....	.....	22 1	.....	.....	20 9	.....	.....	3.1	12 5	15 95
15	.....	.....	.....	23.2	.....	.....	21.2	.....	5.3	.....	14 45	17.3
16	.....	.....	.....	.....	.....	.....	.....	.....	4 8	.....	16.05	18 05
17	.....	18 0	22 7	.....	.....	.....	.....	.....	.....	.....	17 15	18 4
18	.....	18.5	22 0	.....	.....	.....	.....	4 7	.....	.....	17 4	18 1
19	.....	.....	.....	.....	17 4	.....	.....	4 6	.....	.....	17 7	17 3
20	3 6	.....	.....	.....	16.5	.....	.....	.....	.....	8.5	18 0	15.45
21	3.6	.....	.....	26.6	.....	.....	18.7	.....	.....	10.1	18 2	12 2
22	.....	.....	.....	26.5	.....	.....	18 0	.....	4 6	.....	16 6	9 95
23	.....	.....	.....	.....	.....	18 2	.....	.....	5 5	.....	14 9	9 4
24	.....	21.5	9 6	.....	.....	18.8	.....	.....	.....	.....	15 2	8 5
25	.....	22 2	11 3	.....	.....	.....	.....	4 0	.....	.....	13 8	8 1
26	.....	.....	.....	.....	9.2	.....	.....	3 9	.....	.....	16 2	8 6
27	5 8	.....	.....	.....	10 1	.....	.....	.....	.....	7 4	16 0	8 45
28	5.8	.....	.....	25.1	.....	.....	11 5	.....	.....	6.9	14 9	8.3
29	.....	.....	.....	24 3	.....	.....	11.3	.....	4 8	.....	12.6	8 3
30	.....	.....	.....	.....	.....	10 3	.....	.....	4 4	.....	10 05	8 0
31	.....	.....	9 8	.....	.....	.....	.....	.....	.....	.....	.....	7 7

Gage readings Dec. 28-31 were affected by ice conditions. Gage reading Dec. 31 is to top of ice.

Kaskaskia River.

Daily Gage Height in Feet of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	7.6	16.9	21.85	6.2	7.8	19.95
2	8.45	14.35	22.9	6.05	7.2	19.35
3	9.0	11.6	24.2	6.2	8.7	18.7
4	9.0	10.5	24.7	6.1	9.05	18.0
5	9.1	10.8	25.0	6.55	10.1	17.55
6	10.15	11.9	25.25	7.15	10.95	17.95
7	11.15	11.7	25.15	7.15	13.6	18.25
8	11.6	10.65	24.7	7.6	12.9	18.4
9	11.5	9.55	23.95	7.3	12.65	17.9
10	10.7	8.85	23.1	6.65	13.8	15.3
11	9.7	8.45	22.4	6.3	14.5	12.9
12	8.9	8.2	21.75	6.1	14.45	11.3
13	14.4	7.9	21.1	5.85	13.7	10.65
14	18.9	7.75	20.35	5.6	13.8	10.0
15	20.1	7.85	17.5	6.8	14.9	9.0
16	20.8	8.3	14.5	7.55	14.9	7.95
17	21.65	8.75	10.8	11.65	14.25	7.45
18	22.1	8.4	9.45	13.85	13.75	7.8
19	22.45	8.8	8.85	14.95	12.7	7.4
20	22.65	8.65	8.35	14.85	11.2	6.65
21	22.65	8.7	8.05	12.85	10.1	6.1
22	22.55	8.95	7.75	10.05	9.3	7.6
23	22.45	9.1	7.5	8.45	13.9	7.95
24	22.3	10.0	7.3	7.65	18.65	6.75
25	21.8	11.0	7.4	7.15	19.75	6.0
26	21.2	11.4	7.75	6.8	20.5	5.65
27	20.5	17.9	7.8	6.8	21.4	5.55
28	19.8	19.9	7.7	6.8	21.5	6.6
29	19.1	.....	7.25	6.9	21.4	7.3
30	18.5	.....	6.75	7.55	21.15	7.95
31	17.6	.....	6.4	.....	20.5	.....

Gage height Feb. 28 was obtained by interpolation.

Kaskaskia River.

Daily Discharge of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1907.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	6070	.....	.....	4790	.....	.....	.....	.....
2	.....	.....	.....	.....	7680	.....	.....	.....	.....	378	.....	.....
3	.....	.....	.....	2580	.....	.....	.....	.....	.....	378	.....	.....
4	.....	.....	.....	2260	.....	.....	.....	.....	1090	.....	.....	494
5	.....	.....	.....	.....	.....	9230	.....	.....	1010	.....	.....	454
6	.....	8130	3680	.....	.....	9940	.....	.....	.....	.....	1170	.....
7	.....	7860	2800	.....	.....	.....	.....	1420	.....	.....	1010	.....
8	.....	.....	.....	.....	3360	.....	.....	2050	.....	.....	.....	.....
9	.....	.....	.....	.....	3900	.....	.....	.....	.....	2640	.....	.....
10	.....	.....	.....	1750	.....	.....	1510	.....	.....	770	.....	.....
11	.....	.....	.....	1650	.....	.....	1090	.....	738	.....	.....	606
12	.....	.....	.....	.....	.....	14100	.....	.....	682	.....	.....	656
13	.....	974	6070	.....	.....	17200	.....	.....	.....	.....	454	.....
14	.....	770	9820	.....	.....	.....	.....	7260	.....	.....	434	.....
15	.....	.....	.....	.....	5090	.....	.....	6470	.....	.....	.....	.....
16	.....	.....	.....	.....	7680	.....	.....	.....	.....	454	.....	.....
17	.....	.....	.....	1470	.....	.....	1510	.....	.....	414	.....	.....
18	.....	.....	.....	1290	.....	.....	1650	.....	.....	.....	.....	1090
19	.....	.....	.....	.....	.....	18600	.....	.....	.....	.....	.....	1560
20	.....	1650	16500	.....	.....	13000	.....	.....	.....	.....	802	.....
21	.....	1510	13400	.....	.....	.....	.....	4250	.....	.....	560	.....
22	.....	.....	.....	.....	5090	.....	.....	6150	.....	.....	.....	.....
23	24100	.....	.....	.....	5790	.....	.....	.....	.....	360	.....	.....
24	23700	.....	.....	2920	.....	.....	4790	.....	.....	344	.....	.....
25	.....	.....	.....	3630	.....	.....	6150	.....	454	.....	.....	5860
26	.....	.....	.....	.....	.....	2800	.....	.....	454	.....	.....	7020
27	.....	120	8040	.....	.....	3360	.....	.....	.....	.....	682	.....
28	.....	2260	7770	.....	.....	.....	.....	4730	.....	.....	630	.....
29	.....	.....	.....	.....	2860	.....	.....	3190	.....	.....	.....	.....
30	24100	.....	.....	.....	2150	.....	.....	.....	.....	434	.....	.....
31	9120	.....	.....	.....	.....	.....	6150	.....	.....	454	.....	.....
Total.	81020	23274	68080	17550	49670	88230	22850	40310	4428	6626	5742	17740

Kaskaskia River.

Daily Discharge of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.
1	6620	.....	.....	5090	.....	.....	5580	.....	.....	296	.....	.....
2	4790	.....	.....	5090	.....	.....	5090	.....	344	.....	.....	682
3	.....	.....	.....	.....	.....	.....	.....	.....	344	.....	.....	560
4	.....	.....	23700	.....	.....	.....	.....	.....	.....	.....	264	.....
5	.....	3020	23400	.....	.....	.....	.....	682	.....	.....	264	.....
6	.....	6860	.....	.....	24400	.....	.....	682	.....	.....	.....	.....
7	.....	.....	.....	.....	34100	.....	.....	.....	.....	.....	.....	.....
8	4190	.....	.....	6860	.....	.....	5300	.....	.....	.....	.....	.....
9	3190	.....	.....	8910	.....	.....	4730	.....	344	.....	.....	360
10	.....	.....	.....	.....	.....	5510	.....	.....	328	.....	.....	344
11	.....	.....	.....	.....	.....	5790	.....	.....	.....	.....	264	.....
12	.....	10300	.....	.....	.....	.....	.....	738	.....	.....	264	.....
13	.....	9820	.....	.....	54400	.....	.....	974	.....	.....	.....	.....
14	.....	.....	.....	.....	51000	.....	.....	.....	.....	296	.....	.....
15	7340	.....	.....	10500	.....	.....	2920	.....	.....	296	.....	.....
16	8130	.....	.....	9460	.....	.....	2420	.....	312	.....	.....	312
17	.....	.....	.....	.....	.....	7680	.....	.....	312	.....	.....	296
18	.....	.....	17900	.....	.....	7520	.....	.....	.....	.....	264	.....
19	.....	22300	16500	.....	.....	.....	.....	516	.....	.....	264	.....
20	.....	25100	.....	.....	24400	.....	.....	494	.....	.....	.....	.....
21	.....	.....	.....	.....	22000	.....	.....	.....	.....	264	.....	.....
22	3240	.....	.....	4310	.....	.....	2050	.....	.....	264	.....	.....
23	3020	.....	.....	3740	.....	.....	2100	.....	.....	.....	.....	280
24	.....	.....	.....	.....	.....	7680	.....	.....	.....	.....	.....	296
25	.....	.....	7340	.....	.....	7430	.....	.....	.....	.....	.....	.....
26	.....	24100	5090	.....	.....	.....	.....	396	.....	.....	.....	.....
27	.....	23700	.....	.....	22400	.....	.....	378	.....	.....	.....	.....
28	.....	.....	.....	.....	20600	.....	.....	.....	.....	264	.....	.....
29	1700	.....	.....	12700	.....	.....	3900	.....	.....	264	.....	.....
30	1510	.....	.....	19600	.....	.....	3190	.....	296	.....	.....	.....
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	43730	125200	93930	86260	253300	41610	37280	4860	2280	1944	1584	3130

Kaskaskia River.

Daily Discharge of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1909.

Day	Jan.	Feb	Mar.	Apr	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec
1				2260			3580		280		444	2000
2									264		414	1650
3		1510	15100								387	1450
4		1340	13000					2580			378	1290
5					13400			1560			369	1170
6	360				11600					296	360	1190
7	360			3080						280	387	1290
8				5580					312		630	1420
9									312		1170	1470
10			17900			5510					2050	1400
11			21300			5790		710			3240	1190
12								682			2920	2360
13	328									236	3440	5090
14	328		16100				12100			236	4130	6430
15			19900				13000		656		5340	7520
16									538		6510	8180
17		8130	18200								7390	8810
18		8610	15800					516			7600	8220
19					7600			494			7860	7520
20	312				6860					1950	8130	6010
21	312			31700			8810			2800	8310	3960
22				31300			8130		494		6910	2720
23						8310			710		5650	2420
24		14100	2430			8910					5890	1950
25		16500	3460					378			6310	1750
26					2310			360			6620	2000
27	802				2800					1420	6470	1920
28	802			26500			5370			1210	5650	1600
29				21700			3460		538		4190	1450
30						2920			454		2780	1300
31			2640									1200
Total	3091	50190	103930	160120	44570	31430	54450	7280	4558	8428	121929	97660

Discharge Dec. 28-31 was estimated from the gage heights and from climatological and other data.

Kaskaskia River.

Daily Discharge of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	1510	7180	15300	938	1610	10300
2	1920	5260	18 00	887	1340	9520
3	2200	3630	23400	938	2050	8810
4	2200	3020	25100	904	2230	8130
5	2250	3190	26200	1070	2800	7730
6	2830	3800	27000	1310	3270	8080
7	3380	3680	26700	1310	4790	8360
8	3630	3110	25100	1510	4370	8510
9	3580	2500	22500	1380	4220	8040
10	3140	2120	19600	1110	4910	5930
11	2580	1920	17200	974	5370	4370
12	2150	1800	14900	904	5340	3460
13	5300	1650	12700	819	4850	3110
14	9010	1580	10900	738	4910	2750
15	10500	1630	7680	1170	5650	2200
16	11800	1850	5370	1490	5650	1680
17	14600	2080	3190	3660	5200	1450
18	16100	1900	2450	4940	4880	1610
19	17400	2100	2120	5680	4250	1420
20	18000	2020	1880	5620	3410	1110
21	18000	2050	1720	4340	2890	904
22	17700	2180	1580	2780	2360	1510
23	17400	2260	1470	1920	4970	1680
24	16800	2750	1380	1540	8760	1150
25	15100	3300	1420	1310	10000	870
26	13000	3520	1580	1170	11100	754
27	11100	8040	1600	1170	13700	724
28	10100	10200	1560	1170	14100	1090
29	9230	.....	1360	1210	13700	1380
30	8610	.....	1150	1490	12900	1680
31	7770	.....	1010	.....	11100	.....
Total	278890	90320	324020	55452	186590	118312

Kaskaskia River.

Rating Table for Kaskaskia River at New Athens, Ill.

1907 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
3.00	222	9.00	2200	15.00	5720	20.90	12070
3.10	236	9.10	2255	15.10	5790	21.00	12350
3.20	250	9.20	2310	15.20	5860	21.10	12695
3.30	264	9.30	2365	15.30	5930	21.20	13040
3.40	280	9.40	2420	15.40	6000	21.30	13385
3.50	296	9.50	2475	15.50	6070	21.40	13730
3.60	312	9.60	2530	15.60	6150	21.50	14075
3.70	328	9.70	2585	15.70	6230	21.60	14420
3.80	344	9.80	2640	15.80	6310	21.70	14765
3.90	360	9.90	2695	15.90	6390	21.80	15110
4.00	378	10.00	2750	16.00	6470	21.90	15455
4.10	396	10.10	2805	16.10	6545	22.00	15800
4.20	414	10.20	2860	16.20	6620	22.10	16145
4.30	434	10.30	2915	16.30	6700	22.20	16490
4.40	454	10.40	2970	16.40	6780	22.30	16835
4.50	474	10.50	3025	16.50	6860	22.40	17180
4.60	494	10.60	3080	16.60	6940	22.50	17525
4.70	516	10.70	3135	16.70	7020	22.60	17870
4.80	538	10.80	3190	16.80	7100	22.70	18215
4.90	560	10.90	3245	16.90	7180	22.80	18560
5.00	582	11.00	3300	17.00	7260	22.90	18905
5.10	606	11.10	3355	17.10	7345	23.00	19250
5.20	630	11.20	3410	17.20	7430	23.10	19595
5.30	656	11.30	3465	17.30	7515	23.20	19940
5.40	682	11.40	3520	17.40	7600	23.30	20285
5.50	710	11.50	3575	17.50	7685	23.40	20630
5.60	738	11.60	3630	17.60	7770	23.50	20975
5.70	770	11.70	3685	17.70	7860	23.60	21320
5.80	802	11.80	3740	17.80	7950	23.70	21665
5.90	836	11.90	3795	17.90	8040	23.80	22010
6.00	870	12.00	3850	18.00	8130	23.90	22355
6.10	904	12.10	3905	18.10	8220	24.00	22700
6.20	938	12.20	3960	18.20	8310	24.10	23045
6.30	974	12.30	4015	18.30	8410	24.20	23390
6.40	1010	12.40	4070	18.40	8510	24.30	23735
6.50	1048	12.50	4130	18.50	8610	24.40	24080
6.60	1086	12.60	4190	18.60	8710	24.50	24425
6.70	1126	12.70	4250	18.70	8810	24.60	24770
6.80	1166	12.80	4310	18.80	8910	24.70	25115
6.90	1208	12.90	4370	18.90	9010	24.80	25460
7.00	1250	13.00	4430	19.00	9120	24.90	25805
7.10	1292	13.10	4490	19.10	9230	25.00	26150
7.20	1336	13.20	4550	19.20	9340	25.10	26495
7.30	1380	13.30	4610	19.30	9460	25.20	26840
7.40	1424	13.40	4670	19.40	9580	25.30	27185
7.50	1468	13.50	4730	19.50	9700	25.40	27530
7.60	1514	13.60	4790	19.60	9820	25.50	27875
7.70	1560	13.70	4850	19.70	9940	25.60	28220
7.80	1606	13.80	4910	19.80	10070	25.70	28565
7.90	1652	13.90	4970	19.90	10200	25.80	28910
8.00	1700	14.00	5030	20.00	10330	25.90	29255
8.10	1740	14.10	5090	20.10	10470	26.00	29600
8.20	1800	14.20	5150	20.20	10620	27.00	33050
8.30	1850	14.30	5210	20.30	10780	28.00	36500
8.40	1900	14.40	5300	20.40	10950	29.00	39950
8.50	1950	14.50	5370	20.50	11140	30.00	43400
8.60	2000	14.60	5440	20.60	11350	31.00	46850
8.70	2050	14.70	5510	20.70	11570	32.00	50300
8.80	2100	14.80	5580	20.80	11810	33.00	53750
8.90	2150	14.90	5650				

NOTE—The above table is not applicable for ice or obstructed channel conditions. It is based on 16 discharge measurements made during 1909-1910. Above gage height 21.0 feet the rating curve is a tangent, the difference being 345 per tenth.

Kaskaskia River.

Monthly Discharge of Kaskaskia River at New Athens, Ill., for 1907 to 1910.

(Drainage Area 5220 Square Miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1907						
January, 4 days			20300	3.89	4.48	C
February, 8 days			2910	.557	.58	B
March, 8 days			8510	1.63	1.88	B
April, 8 days			2190	.420	.47	B
May, 10 days			4970	.952	1.10	B
June, 8 days			11000	2.11	2.35	B
July, 7 days			3260	.625	.72	B
August, 9 days			4480	.858	.99	B
September, 6 days			738	.141	.16	B
October, 10 days			663	.127	.15	B
November, 8 days			718	.138	.15	B
December, 8 days			2220	.425	.49	B
The year			5160	.989	13.52	
1908						
January, 10 days			4370	.837	.96	B
February, 8 days			15600	2.99	3.22	B
March, 6 days			15700	3.01	3.47	B
April, 10 days			8630	1.65	1.84	B
May, 8 days			31700	6.07	7.00	B
June, 6 days			6940	1.33	1.48	B
July, 10 days			3730	.715	.82	B
August, 8 days			608	.116	.13	B
September, 7 days			326	.062	.07	B
October, 7 days			278	.053	.06	C
November, 6 days			264	.051	.06	C
December, 8 days			391	.075	.09	B
The year			7380	1.41	19.20	
1909						
January, 8 days			450	.086	.10	B
February, 6 days			8360	1.60	1.67	B
March, 9 days			12200	2.34	2.70	B
April, 9 days			17800	3.41	3.80	B
May, 6 days			7430	1.42	1.64	B
June, 5 days			6290	1.20	1.34	B
July, 7 days			7780	1.49	1.72	B
August, 8 days			910	.174	.20	B
September, 10 days			456	.087	.10	B
October, 8 days			1050	.201	.23	B
November	8210	8510	4060	.778	.87	A
December	666		3150	.603	.70	C
The year			5830	1.12	15.07	
1910						
January	18000	1510	9060	1.72	1.98	B
February	10200	1580	3230	.619	.64	A
March	27000	1010	10500	2.01	2.32	A
April	5680	738	1850	.354	.40	A
May	14100	1340	6020	1.15	1.33	A
June	10300	724	3940	.755	.84	A

Shoal Creek near Breese, Ill.

This station is located at the B. & O. S. W. Railroad bridge, about one and one-half miles east of Breese, Ill. It was established Nov. 5, 1909, for the purpose of obtaining data for use in studying problems of drainage, flood control, water supply, and storage, and also to obtain general statistical and comparative data.

Beaver creek is tributary on the left bank about three miles below the section. The total drainage area above the gaging station is about 760 square miles. The intake of the pumping station of the water supply system of Breese is about one-fourth mile above the gaging section.

The datum of the gage has remained unchanged since its installation; the records are accurate and reliable. The creek is fed by springs and has not been known to go dry at this point. The flood of 1907 reached a height of about twenty-two feet on the present gage datum.

Kaskaskia River.

Discharge Measurements of Shoal Creek near Breese, Ill., for 1909 and 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909						
October 29	H. J. Jackson	59	62	1.55	1.77	96
November 19	H. J. Jackson	126	1278	2.12	15.93	2716
December 2	H. J Jackson	68	102	1.63	2.54	165
1910						
March 25	H. J. Jackson	60	63	1.84	1.80	116
May 19	C. T. Bailey	66	98	2.76	2.40	270
May 26	C. T. Bailey	586	2440	1.67	17.36	4080
May 28	C. T. Bailey	136	1440	2.41	17.12	3470
May 31	C. T. Bailey	90	863	2.25	11.85	1940
June 2	C. T. Bailey	74	195	1.98	3.95	387
June 3	C. T. Bailey	70	143	1.94	3.24	278

Kaskaskia River.

Daily Gage Height in Feet of Shoal Creek near Breese, Ill., for 1909 and 1910.

1909.

Day.	Nov.	Dec.
1	.....	2.6
2	.....	2.2
3	.....	2.5
4	.....	2.2
5	1.7	2.5
6	1.6	2.95
7	1.7	3.2
8	2.6	2.9
9	11.5	2.3
10	7.5	2.25
11	3.3	3.2
12	2.9	5.6
13	13.55	12.9
14	15.5	14.5
15	15.1	11.5
16	15.8	8.95
17	16.4	6.5
18	16.1	5.7
19	15.4	5.2
20	8.5	.....
21	5.2	.....
22	6.5	.....
23	9.7	4.15
24	11.1	.....
25	7.9	.....
26	4.6	.....
27	3.5	.....
28	2.9	.....
29	2.9	.....
30	2.7	2.8
31	.....	.....

Gage heights Dec. 8, 9, 10, 23 and 30 were affected by ice conditions.

Kaskaskia River.

Daily Gage Height in Feet of Shoal Creek near Breese, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	.....	2.7	17.6	1.7	2.2	6.2
2	3.4	2.3	18.9	1.7	2.15	5.1
3	3.9	2.2	19.0	1.7	7.8	3.0
4	4.2	5.15	18.1	1.65	13.3	5.2
5	5.0	4.9	16.6	1.65	12.1	13.7
6	6.7	3.8	11.4	3.1	10.4	14.5
7	8.4	2.9	7.5	5.15	7.2	7.4
8	6.6	2.6	5.3	2.8	8.0	4.5
9	5.4	2.3	4.0	2.3	10.6	3.7
10	3.85	2.2	3.6	2.1	7.2	4.0
11	3.4	2.15	2.9	1.8	5.1	3.2
12	3.2	2.1	2.35	1.8	4.2	2.6
13	14.4	2.05	2.3	1.8	8.1	2.3
14	16.0	2.0	2.25	1.85	12.4	2.0
15	16.9	2.25	2.15	2.6	7.2	3.2
16	17.1	2.8	2.1	8.2	5.2	5.3
17	17.9	3.7	2.05	13.4	2.9	6.4
18	17.3	3.2	2.0	14.8	2.6	2.3
19	16.6	2.4	2.0	13.55	2.45	2.15
20	16.65	2.2	1.95	7.15	2.25	7.7
21	16.3	2.4	1.9	4.2	2.1	9.0
22	12.2	2.7	1.95	3.1	3.2	4.7
23	7.1	3.8	1.95	2.6	14.0	2.1
24	5.2	3.7	1.9	2.3	15.8	1.9
25	3.9	2.85	1.9	2.1	16.3	1.8
26	3.5	3.2	1.85	2.35	17.1	1.85
27	3.7	7.8	1.85	2.5	17.85	2.9
28	4.1	16.1	1.8	2.7	17.5	6.1
29	3.9	.....	1.8	2.5	10.5	3.2
30	3.7	.....	1.75	2.25	8.2	2.0
31	3.0	.....	1.75	.....	12.5	.....

Gage heights Jan. 1-19 were affected by ice conditions, and discharges were not estimated

Kaskaskia River.

Daily Discharge of Shoal Creek near Breese, Ill., for 1909 and 1910.

1909.

Day.	Nov.	Dec.
1	.....	185
2	.....	137
3	.....	173
4	.....	137
5	90	173
6	84	228
7	90	267
8	185	180
9	1800	130
10	1020	120
11	283	267
12	222	678
13	2240	2100
14	2710	2450
15	2600	1800
16	2810	1290
17	3050	840
18	2920	696
19	2680	606
20	1200	500
21	606	400
22	840	300
23	1440	240
24	1720	220
25	1090	200
26	502	170
27	315	130
28	222	100
29	222	80
30	197	70
31	.....	70
	31138	14937

Discharge Dec. 8-10, Dec. 20-31 was estimated from gage heights and climatological and other data.

Kaskaskia River.

Daily Discharge of Shoal Creek near Breese, Ill., for 1909 and 1910.

1910.

Day.	an	Feb.	Mar.	Apr.	May.	June.
1	.....	197	4290	90	137	786
2	.....	149	5970	90	132	588
3	.....	137	6100	90	1070	235
4	.....	597	4930	87	2190	606
5	.....	553	3160	87	1920	2270
6	.....	366	1780	251	1580	2450
7	.....	222	1020	597	966	1000
8	.....	185	624	209	1110	485
9	.....	149	400	149	1620	349
10	.....	137	332	126	966	400
11	.....	132	222	98	588	267
12	.....	126	179	98	434	185
13	.....	120	149	98	1130	149
14	.....	115	143	102	1990	115
15	.....	143	132	185	966	267
16	.....	209	126	1150	606	624
17	.....	349	120	2210	222	822
18	.....	267	115	2520	185	149
19	.....	151	115	2240	167	132
20	3200	137	110	957	143	1060
21	3000	161	106	434	126	1300
22	1940	197	110	251	267	519
23	948	366	110	185	2340	126
24	606	349	106	149	2810	106
25	383	216	106	161	3000	98
26	315	267	102	155	3690	102
27	349	1070	102	173	4600	222
28	417	3050	98	197	4170	768
29	383	.....	98	173	1600	267
30	349	.....	94	143	1150	115
31	235	.....	94	.....	2010	.....
Total.	12125	10127	31143	13455	43885	16562

Kaskaskia River.

Rating Table for Shoal Creek near Breese, Ill., for 1909 and 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.09	..	5.60	678	10.10	1520	14.60	2474
1.10	..	5.70	696	10.20	1540	14.70	2498
1.20	..	5.80	714	10.30	1560	14.80	2522
1.30	..	5.90	732	10.40	1580	14.90	2546
1.40	..	6.00	750	10.50	1600	15.00	2570
1.50	..	6.10	768	10.60	1620	15.10	2596
1.60	84	6.20	786	10.70	1640	15.20	2622
1.70	90	6.30	804	10.80	1660	15.30	2650
1.80	98	6.40	822	10.90	1680	15.40	2678
1.90	106	6.50	840	11.00	1700	15.50	2708
2.00	115	6.60	858	11.10	1720	15.60	2740
2.10	126	6.70	876	11.20	1740	15.70	2774
2.20	137	6.80	894	11.30	1760	15.80	2808
2.30	149	6.90	912	11.40	1780	15.90	2844
2.40	161	7.00	930	11.50	1800	16.00	2880
2.50	173	7.10	948	11.60	1820	16.10	2920
2.60	185	7.20	966	11.70	1840	16.20	2960
2.70	197	7.30	984	11.80	1860	16.30	3000
2.80	209	7.40	1002	11.90	1880	16.40	3050
2.90	222	7.50	1020	12.00	1900	16.50	3100
3.00	235	7.60	1038	12.10	1922	16.60	3160
3.10	251	7.70	1056	12.20	1944	16.70	3240
3.20	267	7.80	1074	12.30	1966	16.80	3340
3.30	283	7.90	1092	12.40	1988	16.90	3450
3.40	299	8.00	1110	12.50	2010	17.00	3570
3.50	315	8.10	1129	12.60	2032	17.10	3690
3.60	332	8.20	1148	12.70	2054	17.20	3810
3.70	349	8.30	1167	12.80	2076	17.30	3930
3.80	366	8.40	1186	12.90	2098	17.40	4050
3.90	383	8.50	1205	13.00	2120	17.50	4170
4.00	400	8.60	1224	13.10	2142	17.60	4290
4.10	417	8.70	1243	13.20	2164	17.70	4410
4.20	434	8.80	1262	13.30	2186	17.80	4540
4.30	451	8.90	1281	13.40	2208	17.90	4670
4.40	468	9.00	1300	13.50	2230	18.00	4800
4.50	485	9.10	1320	13.60	2252	18.10	4930
4.60	502	9.20	1340	13.70	2274	18.20	5060
4.70	519	9.30	1360	13.80	2296	18.30	5190
4.80	536	9.40	1380	13.90	2318	18.40	5320
4.90	553	9.50	1400	14.00	2340	18.50	5450
5.00	570	9.60	1420	14.10	2362	18.60	5580
5.10	588	9.70	1440	14.20	2384	18.70	5710
5.20	606	9.80	1460	14.30	2406	18.80	5840
5.30	624	9.90	1480	14.40	2428	18.90	5970
5.40	642	10.00	1500	14.50	2450	19.00	6100
5.50	660						

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 10 discharge measurements made during 1909-1910, and is fairly well defined between gage heights 1.7 feet and 17.3 feet.

Kaskaskia River.

Monthly Discharge of Shoal Creek near Breese, Ill., for 1909 and 1910.

(Drainage area 760 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1909						
November 5-30	3050	.....	1200	1.58	1.53	B
December	84	.....	482	.634	.73	C
1910						
January 20-31	.....	.....	1010	1.33	.59	B
February	3050	115	362	.476	.50	B
March	6100	94	1000	1.32	1.52	B
April	2520	87	448	.590	.66	B
May	4600	126	1420	1.87	2.16	B
June	2450	98	552	.726	.81	B

Silver Creek near Lebanon, Ill.

This station is located at the highway bridge at Wrights Crossing, about two miles west of Lebanon, Ill., between the B. & O. S. W. Railroad and the East St. Louis & Suburban Railway bridges across Silver creek. It was established March 3, 1908, for the purpose of collecting data for use in studying drainage and flood control problems, and to obtain general statistical and comparative data.

There are no tributaries near the gaging station. This stream is a tributary of the Kaskaskia river, emptying into it about one mile above the gaging station at New Athens, Ill. The drainage area above the station is about 335 square miles.

The datum of the gage has remained unchanged since its installation. From March 3, 1908, to May 10, 1909, this gage was so situated that two feet was the lowest obtainable reading, and the gage reader noted that the stream was dry whenever the water surface was below two feet. Upon inquiry he stated that the stream was dry only one week during 1908. Therefore, where gage heights have been marked "Dry" by the gage reader during this period, this note was inserted: "Dry under gage, can not obtain gage height of water surface." The position of the gage was changed on May 10, 1909, so as to obviate this difficulty. Except as noted above the records are accurate and reliable.

Kaskaskia River.

Discharge Measurements of Silver Creek near Lebanon, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
March 21	R. J. Taylor	38	111	0.64	3.5	71
May 2	R. J. Taylor	41	130	0.82	4.25	107
July 9	R. J. Taylor	35	107	0.54	3.5	58
1909						
February 23	R. J. Taylor	378	1614	1.09	12.56	1757
March 14	Wm. M. O'Neill	46	85	0.97	5.34	180
March 25	Wm. M. O'Neill	50	254	1.24	6.66	314
May 8	H. J. Jackson	32	90	0.38	*2.77	34
May 10	H. J. Jackson	62	434	1.75	10.03	761
August 14	H. J. Jackson	24	70	0.08	2.24	6
November 4	H. J. Jackson	26	77	.07	2.28	6
November 17	H. J. Jackson	360	1324	.85	12.04	1124
November 20	H. J. Jackson	53	347	1.18	8.54	410
1910						
March 22	H. J. Jackson	31	100	0.42	3.00	42
May 27	C. T. Bailey	103	579	1.64	11.75	†947
May 28	C. T. Bailey	53	395	1.18	9.24	466

* Not at regular section.
† Increase discharge 53 cfs. for flow in flood channels. A. H. H. June 21, 1910.

Kaskaskia River.

Daily Gage Height in Feet of Silver Creek near Lebanon, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1				4.5	5.1	3.7	2.5	2.0				3.2
2				4.4	4.4	3.4	2.0					2.7
3				4.3		3.2	2.3	2.0				
4				4.0	4.2	5.4	2.5					
5					13.9	6.2						
6				4.0	15.5	6.0	2.5	3.9				
7				4.3	15.9		4.0	6.5				
8				5.0	15.5	5.2	5.4	5.8				
9				10.4	14.1	6.0	3.5					
10				11.0		7.8	2.7	5.0				
11				11.0	11.9	5.0	2.3	4.7				
12					9.8	3.6		4.2				
13				5.3	5.8	4.2	2.0	3.0				
14				4.2	7.2		2.0	2.0				
15				4.2	6.2	10.8	2.3	2.0				
16				4.8	4.9	7.5	3.0					
17				4.8		5.0	4.0					
18				6.6	3.2	5.2						
19					6.0	2.8						
20				4.5	5.3	2.6	2.7					
21			3.5	3.9	4.1		4.2					
22				3.5	11.0	3.5	5.1					
23			3.4	5.2	12.2	2.7	3.6					
24			3.3	11.1		4.5	3.6					
25			3.3	11.3	12.4	3.2	3.6					
26			3.2		11.8	2.5						
27			3.1	12.5	8.6	2.0	3.8					
28			3.5	12.1	11.0		7.5					
29				11.7	7.8	8.9	6.5					
30			3.7	8.8	7.0	2.8	3.5					
31			4.3				2.5				3.4	

For explanation of missing gage heights from Aug. 16, 1908, to Nov. 29, and from Dec. 3 to Jan. 20, 1909, see description of station.

Kaskaskia River.

Daily Gage Height in Feet of Silver Creek near Lebanon, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	5.0	9.3	3.1	3.1	5.1	3.0	.....	0.6	1.0	2.2	3.1
2	.....	4.5	8.7	3.1	.....	7.6	2.3	2.1	0.6	0.9	2.2	3.15
3	.....	3.2	5.0	3.2	3.0	8.8	1.8	2.0	0.6	0.8	2.2	3.2
4	.....	4.0	3.6	.....	3.0	10.4	.....	2.0	0.6	0.7	2.2	3.15
5	.....	4.7	3.2	3.0	3.0	11.5	4.3	1.9	0.6	0.7	2.2	3.3
6	.....	7.5	2.7	2.8	2.9	.....	6.5	1.7	0.6	0.6	2.2	3.35
7	.....	.....	.....	7.1	2.9	11.7	11.2	1.7	0.7	0.6	2.65	3.5
8	.....	6.2	9.5	5.6	2.8	10.9	13.6	.....	0.7	0.6	5.15	3.45
9	.....	5.3	12.6	4.4	.....	10.4	14.0	1.6	0.8	0.6	8.6	3.45
10	.....	5.0	13.0	3.5	10.0	10.0	12.0	1.6	0.9	0.6	9.0	3.45
11	.....	4.7	12.8	.....	8.5	8.2	.....	1.5	0.9	0.6	5.75	3.0
12	.....	4.2	11.0	3.0	8.0	4.5	12.2	1.5	1.2	0.55	5.0	5.4
13	.....	3.5	9.2	12.3	8.7	.....	12.6	1.5	1.9	0.55	9.2	9.9
14	.....	.....	.....	13.5	10.4	3.7	8.5	4.5	1.9	0.5	10.3	10.7
15	.....	10.4	7.8	13.0	11.0	3.4	6.2	2.0	1.7	0.55	12.9	11.0
16	.....	10.7	6.7	12.5	.....	2.5	3.5	1.5	1.7	0.6	12.6	10.4
17	.....	8.5	5.0	9.8	5.7	2.5	3.1	1.5	1.5	0.7	12.1	6.9
18	.....	6.4	3.6	.....	4.1	2.5	.....	1.4	1.0	8.8	11.95	6.1
19	.....	11.2	.....	9.9	3.3	2.5	2.8	1.2	1.0	10.0	11.9	5.7
20	.....	12.1	.....	11.3	3.0	.....	2.5	1.0	1.0	9.9	10.35	4.5
21	2.7	.....	.....	12.8	3.0	2.4	2.3	1.0	1.2	10.0	5.4	3.8
22	4.0	12.2	.....	14.0	2.7	2.4	2.0	1.0	6.0	9.7	4.2	3.25
23	4.2	12.7	.....	13.8	.....	3.5	1.9	0.9	5.1	6.1	9.0	3.1
24	.....	12.5	5.4	12.5	2.7	3.2	1.7	0.8	3.5	5.0	7.4	3.0
25	4.2	12.5	8.7	.....	3.6	3.0	.....	0.7	2.3	4.1	5.1	3.0
26	3.7	11.2	6.5	8.2	5.5	2.7	10.0	0.7	1.7	3.2	4.2	3.0
27	2.8	10.0	5.8	4.3	5.0	.....	8.7	0.7	1.5	2.8	3.7	3.0
28	3.6	.....	.....	3.8	4.3	2.5	5.1	0.7	1.0	2.5	3.5	3.0
29	4.5	.....	3.7	3.6	3.0	4.1	2.9	0.7	1.0	2.3	3.3	3.0
30	8.2	.....	3.5	3.3	.....	3.5	2.5	0.6	0.9	2.3	3.2	3.0
31	.....	.....	3.3	.....	3.5	.....	2.3	0.6	.....	2.3	.....	2.9

Gage heights Dec. 17-31 were read to top of ice.
For explanation of missing gage heights Jan. 1-20 see description of station.

Kaskaskia River.

Daily Gage Height in Feet of Silver Creek near Lebanon, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	3.1	3.6	14.6	2.7	3.0	3.8
2	5.4	3.75	13.8	2.6	2.9	3.0
3	5.4	4.0	13.0	2.6	5.0	2.8
4	6.2	5.8	12.3	2.7	8.7	2.8
5	7.0	6.5	11.6	3.6	8.2	9.5
6	8.0	4.7	8.6	4.9	4.5	11.0
7	7.9	3.9	5.6	4.8	5.1	12.0
8	7.7	3.7	4.7	3.8	8.6	11.5
9	6.9	3.6	4.2	3.1	8.1	8.1
10	4.7	3.6	3.9	2.9	5.4	9.5
11	4.9	3.55	3.7	2.7	4.2	6.4
12	7.1	3.5	3.6	2.9	5.5	4.8
13	11.2	3.5	3.5	2.8	6.0	3.4
14	13.9	3.5	3.4	2.7	5.5	3.05
15	14.3	4.1	3.25	3.6	4.7	3.1
16	13.2	5.1	3.2	9.6	3.2	4.3
17	12.8	7.6	3.2	10.3	3.1	4.65
18	12.2	6.1	3.2	10.6	3.2	3.2
19	11.9	5.3	3.2	8.1	3.1	2.9
20	12.3	4.9	3.2	5.0	2.9	2.7
21	11.9	4.4	3.15	4.0	2.7	2.9
22	11.5	4.5	3.1	3.5	2.6	3.9
23	8.7	4.9	3.0	3.3	11.6	2.9
24	5.8	4.9	3.0	3.2	13.2	2.5
25	4.5	4.5	3.0	3.1	13.8	2.35
26	4.5	4.5	3.0	3.1	12.7	2.5
27	4.5	11.0	2.9	3.5	12.0	2.6
28	4.5	11.9	2.9	3.4	9.3	4.7
29	4.6	.....	2.9	3.4	7.4	3.25
30	4.3	.....	2.8	3.2	5.1	2.55
31	4.0	.....	2.8	.....	4.6	.....

Gage heights Jan. 1-10 are to the top of ice.

Daily Discharge of Silver Creek near Lebanon, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1				122	164	74	23	10				49
2				116	116	59	10	10				29
3				110	110	49	17	10				
4				92	104	187	23	8				
5				92	3080	253	23	8				
6				92	4800	235	23	86				
7				110	5240	203	92	280				
8				157	4800	171	187	219				
9				730	3300	235	64	188				
10				860	2240	405	29	157				
11				860	1190	157	17	136				
12				520	639	69	14	104				
13				179	219	104	10	41				
14				104	345	459	10	10				
15				104	253	814	17	10				
16				143	150	375	41					
17				143	220	157	92					
18				143	289	49	171					
19				132	236	33	100					
20				122	179	26	29					
21			64	86	98	45	104					
22			62	64	860	64	164					
23			59	171	1400	29	69					
24			54	885	1490	122	69					
25			54	945	1580	49	69					
26			49	1310	1140	23	74					
27			45	1680	492	10	80					
28			64	1320	860	269	375					
29			69	1090	405	528	280					
30			74	516	325	33	64					
31			110		200		23				59	
Total.			704	12998	36523	5236	2363	1277			59	78

Discharges on those days that the gage was not read were obtained by interpolation.

Kaskaskia River.

Daily Discharge of Silver Creek near Lebanon, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	157	576	45	45	164	41	14	.1	1.	14	45
2	.....	122	504	45	43	385	17	12	.1	.7	14	47
3	.....	49	157	49	41	516	7	10	.1	.4	14	49
4	.....	92	69	45	41	730	58	10	.1	.2	14	47
5	.....	136	49	41	41	1010	110	8	.1	.2	14	54
6	.....	375	29	33	37	1050	280	6	.1	.1	14	56
7	.....	314	314	335	37	1090	915	6	.2	.1	28	64
8	.....	253	600	203	33	836	2780	5	.2	.1	168	60
9	.....	179	1780	116	349	730	3190	5	.4	.1	492	50
10	.....	157	2180	64	665	665	1240	5	.7	.1	540	40
11	.....	136	1980	52	480	447	1320	4	.7	.1	215	35
12	.....	104	860	41	425	122	1400	4	2.0	.05	157	187
13	.....	64	564	1490	504	146	1780	4	8	.05	564	652
14	.....	397	484	2680	730	74	480	122	8	.00	712	792
15	.....	730	405	2180	860	59	253	10	6	.05	2080	860
16	.....	792	298	1680	536	23	64	4	6	.1	1780	730
17	.....	480	157	639	211	23	45	4	4	.2	1320	250
18	.....	271	69	646	98	23	39	3	1	516	1220	200
19	.....	915	89	652	54	23	33	2	1	665	1190	150
20	.....	1320	108	945	41	22	23	1	1	652	721	100
21	29	1360	128	1980	41	20	17	1	2	665	187	80
22	92	1400	148	3190	29	20	10	1	235	626	104	60
23	104	1880	167	2980	29	64	8	0.7	164	244	540	40
24	104	1680	187	1680	29	49	6	.4	64	157	365	30
25	104	1680	504	1060	69	41	336	.2	17	98	164	20
26	74	915	280	447	195	29	665	.2	6	49	104	20
27	33	665	249	110	157	26	504	.2	4	33	74	20
28	69	620	146	80	110	23	164	.2	1	23	64	20
29	122	.....	74	69	41	98	37	.2	1	17	54	15
30	447	.....	64	54	52	64	23	.1	0.7	17	49	15
31	302	.....	54	.....	64	.....	17	.1	.....	17	.....	15
Total.	4480	17243	13243	23631	6087	8572	15862	243.3	534.5	3782.55	12976	4803

Discharge on those days when the gage was not read was obtained by interpolation.
Discharge Dec. 8-11, 17-31 was estimated from gage height, climatological and other data.

Kaskaskia River.

Daily Discharge of Silver Creek near Lebanon, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	20	69	3820	29	41	80
2	100	77	2980	26	37	41
3	100	92	2180	26	157	33
4	150	219	1490	29	504	33
5	200	280	1050	69	447	600
6	300	136	492	150	122	860
7	300	86	203	143	164	1240
8	250	74	136	80	492	1010
9	200	69	104	45	436	436
10	120	69	86	37	187	600
11	150	66	74	29	104	271
12	335	64	69	37	195	143
13	915	64	64	33	235	59
14	3080	64	59	29	195	43
15	3500	98	52	69	136	45
16	2380	164	49	613	49	110
17	1980	385	49	712	45	132
18	1400	244	49	770	49	49
19	1190	179	49	436	45	37
20	1490	150	49	157	37	29
21	1190	116	47	92	29	37
22	1010	122	45	64	26	86
23	504	150	41	54	1050	37
24	219	150	41	49	2380	23
25	122	122	41	45	2980	18
26	122	122	41	45	1880	23
27	122	860	37	64	1240	26
28	122	1190	37	59	576	136
29	129	.....	37	59	365	52
30	110	.....	33	49	164	24
31	92	.....	33	.....	129	.....
Total	21902	5481	13578	4099	14496	6313

Discharge Jan. 1-10 was estimated from gage height, climatological and other data.

Kaskaskia River.

Rating Table for Silver Creek near Lebanon, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
0.00	--	4.10	98	8.10	436	12.10	1320
.10	--	4.20	104	8.20	447	12.20	1400
.20	--	4.30	110	8.30	458	12.30	1490
.30	--	4.40	116	8.40	469	12.40	1580
0.40	--	4.50	122	8.50	480	12.50	1680
0.50	--	4.60	129	8.60	492	12.60	1780
.60	.1	4.70	136	8.70	504	12.70	1880
.70	.2	4.80	143	8.80	516	12.80	1980
.80	.4	4.90	150	8.90	528	12.90	2080
.90	.7	5.00	157	9.00	540	13.00	2180
1.00	1.0	5.10	164	9.10	552	13.10	2280
1.10	1.5	5.20	171	9.20	564	13.20	2380
1.20	2.0	5.30	179	9.30	576	13.30	2480
1.30	2.5	5.40	187	9.40	588	13.40	2580
1.40	3.0	5.50	195	9.50	600	13.50	2680
1.50	4	5.60	203	9.60	613	13.60	2780
1.60	5	5.70	211	9.70	626	13.70	2880
1.70	6	5.80	219	9.80	639	13.80	2980
1.80	7	5.90	227	9.90	652	13.90	3085
1.90	8	6.00	235	10.00	665	14.00	3190
2.00	10	6.10	244	10.10	679	14.10	3295
2.10	12	6.20	253	10.20	695	14.20	3400
2.20	14	6.30	262	10.30	712	14.30	3505
2.30	17	6.40	271	10.40	730	14.40	3610
2.40	20	6.50	280	10.50	750	14.50	3715
2.50	23	6.60	289	10.60	770	14.60	3820
2.60	26	6.70	298	10.70	792	14.70	3925
2.70	29	6.80	307	10.80	814	14.80	4030
2.80	33	6.90	316	10.90	836	14.90	4040
2.90	37	7.00	325	11.00	860	15.00	4250
3.00	41	7.10	335	11.10	885	15.10	4360
3.10	45	7.20	345	11.20	915	15.20	4470
3.20	49	7.30	355	11.30	945	15.30	4580
3.30	54	7.40	365	11.40	975	15.40	4690
3.40	59	7.50	375	11.50	1010	15.50	4800
3.50	64	7.60	385	11.60	1050	15.60	4910
3.60	69	7.70	395	11.70	1090	15.70	5020
3.70	74	7.80	405	11.80	1140	15.80	5130
3.80	80	7.90	415	11.90	1190	15.90	5240
3.90	86	8.00	425	12.00	1240	16.00	5350
4.00	92						

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 15 discharge measurements made during 1908-1910, and is fairly well defined between gage heights 2.7 feet and 12.6 feet.

Kaskaskia River.

Monthly Discharge of Silver Creek near Lebanon, Ill., for 1908 to 1910.

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Feet.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
January						
February						
March 21-31	110	14	64.0	.191	.08	B
April	1680	64	433	1.29	1.44	B
May	5240	98	1180	3.52	4.06	C
June	814	10	175	.522	.58	B
July	375	10	76.2	.227	.26	B
August 1-15	280		85.1	.254	.14	C
September						
October						
November						
December						
The year						
1909						
January 21-31	447	29	135	.403	.16	C
February	1880	49	616	1.84	1.92	B
March	2180	29	427	1.27	1.46	B
April	3190	33	788	2.35	2.62	B
May	860	29	196	.585	.67	B
June	1090	20	286	.854	.95	B
July	3190	6	512	1.53	1.76	B
August	122	.1	7.85	.023	.03	C
September	235	.1	17.8	.053	.06	C
October	665	.00	122	.364	.42	C
November	2080	14	433	1.29	1.44	B
December	860	0.00	155	.463	.53	C
The year						
1910						
January	3500		707	2.11	2.43	C
February	1190	64	196	.585	.61	B
March	3820	33	438	1.31	1.51	B
April	770	26	137	.409	.46	B
May	2980	26	468	1.40	1.61	B
June	1240	18	210	.627	.70	B

LITTLE WABASH RIVER.

Skillet Fork River near Wayne City, Ill.

This station is located at the Southern Railway bridge, about one mile east of Wayne City, Ill. It was established Aug. 16, 1908, for the purpose of obtaining data for use in studying problems of drainage and flood control, and also to obtain general statistical and comparative data.

Horse creek is tributary on the right bank about four miles above the section. The drainage area above the gaging section is about 481 square miles.

The gage datum has remained unchanged since its installation and the records are accurate and reliable.

On March 11, 1909, the water reached a height of 22.8 feet on the gage.

Little Wabash River.

Discharge Measurements of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

Date	Hydrographer	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
July 18	R. J. Taylor	19.5	38	0.63	(a)2.2	1
1909						
February 19	R. J. Taylor	136	1147	1.04	12.36	1189
March 11	Wm. M. O'Neill	648	5137	1.61	20.75	8264
November 10	H. J. Jackson	24	45	.08	(b)2.54	4
1910						
March 1	H. J. Jackson	652	4975	1.22	(c)20.72	6050
March 12	H. J. Jackson	652	5004	1.29	20.72	6470
March 6	H. J. Jackson	138	1049	0.93	11.90	980
March 7	H. J. Jackson	114	590	0.73	8.12	432
March 8	H. J. Jackson	92	287	0.77	5.26	222
March 9	H. J. Jackson	81	211	0.74	4.55	157

(a) Not at regular section. (b) Not at regular section. (c) Drifts around trestle bents reduced flow.

Little Wabash River.

Daily Gage Height in Feet of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

1908.

Day.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	2.0	1.7	2.0	2.3
2	.....	2.0	1.6	1.9	2.4
3	.....	2.0	1.6	1.8	2.2
4	.....	2.0	1.7	1.6	2.1
5	.....	2.0	1.9	1.9	2.1
6	.....	2.0	1.7	1.7	2.2
7	.....	2.0	1.9	1.8	2.3
8	.....	2.0	1.8	1.9	2.4
9	.....	2.0	1.6	2.0	1.9
10	.....	2.0	1.7	1.8	1.8
11	.....	1.9	1.8	1.7	1.7
12	.....	1.9	1.9	1.9	1.9
13	.....	1.9	1.8	2.0	2.1
14	.....	1.9	1.8	1.9	1.9
15	.....	1.8	1.7	1.8	1.8
16	2.2	1.8	1.6	1.7	2.0
17	2.2	1.8	1.7	1.6	1.8
18	2.2	1.8	1.8	1.8	2.1
19	2.2	1.8	1.9	1.9	2.0
20	2.2	1.7	1.8	1.7	1.9
21	2.2	1.7	1.6	1.8	2.0
22	2.2	1.6	1.7	1.8	2.1
23	2.2	1.6	1.9	1.7	2.2
24	2.2	1.6	1.8	1.9	2.0
25	2.2	1.7	1.6	2.0	1.9
26	2.2	1.7	1.5	1.8	2.0
27	2.1	1.6	1.7	1.6	2.0
28	2.1	1.9	1.8	1.7	2.0
29	2.0	1.8	1.6	2.7	1.8
30	2.0	1.8	1.7	2.5	2.0
31	2.0	.....	1.8	.....	2.1

Little Wabash River.

Daily Gage Height in Feet of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.1	2.7	5.0	2.8	3.2	3.4	3.9	8.2	2.0	2.4	2.6	2.0
2	2.1	2.6	4.1	2.6	2.8	3.0	3.8	3.2	2.1	2.3	2.7	2.8
3	2.1	2.8	3.5	2.4	2.7	4.2	3.6	3.1	2.2	2.3	2.7	2.7
4	2.1	2.7	3.2	2.6	2.6	11.2	3.4	3.0	2.1	2.2	2.8	2.7
5	2.2	2.6	3.2	2.8	2.8	14.1	3.0	2.8	2.1	2.2	2.8	2.7
6	2.2	2.7	2.6	2.7	2.6	16.3	2.4	2.6	1.9	2.2	2.7	2.85
7	2.1	3.1	3.1	4.0	2.7	7.5	2.4	2.9	1.9	2.2	2.6	2.9
8	2.0	4.2	3.6	5.6	2.8	4.5	2.4	2.7	2.0	2.1	2.6	2.9
9	2.1	4.2	3.1	7.7	2.9	3.3	3.3	2.5	4.2	2.0	2.6	3.0
10	2.0	4.9	21.1	5.6	3.0	3.2	3.9	2.5	4.9	2.0	2.55	3.1
11	2.1	4.9	21.8	4.8	3.2	3.0	4.2	2.4	3.5	2.0	2.55	3.15
12	2.2	4.6	21.3	4.2	3.6	2.9	9.2	2.3	3.0	1.9	5.65	3.6
13	2.2	4.9	20.6	5.6	4.0	6.8	9.5	2.3	3.1	1.9	8.15	17.6
14	2.2	8.5	19.6	16.5	4.8	8.5	10.3	2.2	2.8	1.9	8.3	18.8
15	2.3	11.6	12.0	19.6	8.6	7.8	13.5	2.1	2.6	2.0	5.8	18.7
16	2.3	17.4	5.6	19.0	8.4	3.6	4.1	2.2	2.5	2.0	5.85	18.0
17	2.0	9.3	4.1	18.2	6.2	5.4	3.7	2.2	2.4	2.0	9.4	13.3
18	2.1	7.5	3.5	12.2	3.5	4.3	3.5	2.2	2.3	2.1	10.9	6.7
19	2.2	7.5	3.1	5.2	3.4	6.8	2.9	2.1	2.3	2.1	8.5	5.0
20	2.2	18.4	2.9	12.4	2.8	4.3	3.0	2.1	2.3	4.1	5.4	4.7
21	2.9	17.2	2.6	18.3	2.5	2.6	3.6	2.0	2.4	4.2	3.9	3.55
22	2.8	13.0	2.9	19.0	2.3	2.8	3.1	2.0	2.9	4.7	3.4	3.0
23	2.9	18.2	2.6	19.2	2.0	2.6	2.9	2.1	5.1	3.2	4.85	2.9
24	2.9	20.6	2.5	18.3	2.5	6.4	2.7	2.2	5.7	5.2	10.3	2.8
25	2.8	20.3	2.7	17.4	2.5	4.6	2.6	2.1	3.7	4.7	10.9	2.7
26	2.9	18.0	2.8	11.3	2.5	4.5	2.5	2.2	3.0	3.3	5.8	2.5
27	2.7	13.0	2.7	8.5	11.2	4.4	2.5	2.2	2.8	3.1	4.3	2.55
28	2.6	7.1	5.2	3.2	14.1	4.6	2.4	2.0	2.7	2.8	3.5	2.5
29	2.9	..	3.7	2.9	6.6	3.9	2.5	1.9	2.5	2.7	3.1	2.45
30	2.6	.....	3.1	3.3	6.7	4.0	6.5	1.9	2.4	2.6	3.0	2.4
31	2.9	.....	2.8	....	6.4	.....	7.9	1.9	.....	2.6	.....	2.35

Little Wabash River.

Daily Gage Height in Feet of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	2.3	4.0	20.6	2.55	5.3	2.6
2	2.5	3.9	20.7	2.55	3.6	2.5
3	2.55	3.7	20.4	2.7	3.1	2.5
4	3.6	3.5	19.9	2.75	4.2	2.45
5	4.0	4.5	18.9	2.65	3.5	2.4
6	5.4	5.9	14.0	3.0	3.2	2.7
7	5.8	4.4	7.6	3.0	2.9	3.2
8	5.35	3.5	5.6	2.95	4.9	3.1
9	4.3	3.25	4.55	2.9	5.3	2.9
10	3.0	3.2	3.95	2.85	4.2	2.8
11	2.7	3.2	3.7	2.8	3.7	2.55
12	2.6	3.15	3.2	2.75	3.8	2.55
13	5.8	3.1	3.1	2.8	5.6	2.5
14	17.0	3.15	3.0	2.8	5.0	2.5
15	17.7	3.1	2.95	2.7	4.7	2.5
16	16.7	4.3	2.9	2.8	3.2	2.4
17	15.7	4.7	2.8	7.15	3.0	2.4
18	16.0	5.3	2.75	5.9	2.7	2.4
19	17.9	5.8	2.7	5.25	2.05	2.35
20	17.6	6.0	2.75	4.25	2.8	2.35
21	12.9	7.2	2.7	3.85	2.7	2.3
22	10.3	10.2	2.7	3.5	2.65	2.3
23	9.8	13.6	2.65	3.1	3.1	2.25
24	5.4	11.6	2.65	3.5	9.1	2.25
25	4.7	10.3	2.65	4.5	8.1	2.25
26	4.25	7.6	2.7	4.7	5.5	2.25
27	4.8	18.6	2.7	5.8	3.9	2.25
28	5.7	20.5	2.65	6.9	3.6	2.2
29	6.0	.....	2.6	6.3	2.95	2.2
30	5.4	.....	2.6	5.8	2.8	2.25
31	4.6	.....	2.55	.....	2.7	.....

Little Wabash River.

Daily Discharge of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

1908.

Day.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	2.0	1.2	2.0	5.0
2	.....	2.0	1.1	1.7	7.0
3	.....	2.0	1.1	1.4	3.5
4	.....	2.0	1.2	1.1	2.5
5	.....	2.0	1.7	1.7	2.5
6	.....	2.0	1.2	1.2	3.5
7	.....	2.0	1.7	1.4	5.0
8	.....	2.0	1.4	1.7	7.0
9	.....	2.0	1.1	2.0	1.7
10	.....	2.0	1.2	1.4	1.4
11	.....	1.7	1.4	1.2	1.2
12	.....	1.7	1.7	1.7	1.7
13	.....	1.7	1.4	2.0	2.5
14	.....	1.7	1.4	1.7	1.7
15	.....	1.4	1.2	1.4	1.4
16	3.5	1.4	1.1	1.2	2.0
17	3.5	1.4	1.2	1.1	1.4
18	3.5	1.4	1.4	1.4	2.5
19	3.5	1.4	1.7	1.7	2.0
20	3.5	1.2	1.4	1.2	1.7
21	3.5	1.2	1.1	1.4	2.0
22	3.5	1.1	1.2	1.4	2.5
23	3.5	1.1	1.7	1.2	3.5
24	3.5	1.1	1.4	1.7	2.0
25	3.5	1.2	1.1	2.0	1.7
26	3.5	1.2	1.0	1.4	2.0
27	2.5	1.1	1.2	1.1	2.0
28	2.5	1.7	1.4	1.2	2.0
29	2.0	1.4	1.1	19.	1.4
30	2.0	1.4	1.2	10.	2.0
31	2.0	.....	1.4	.....	2.5
Total	49.5	47.5	40.6	70.6	80.8

Little Wabash River.

Daily Discharge of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb	Mar.	Apr.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.5	19	190	25	55	70	107	499	2.0	7	14	2.0
2	2.5	14	122	14	25	40	100	55	2.5	5	19	25
3	2.5	25	77	7.0	19	130	85	47	3.5	5	19	19
4	2.5	19	55	14	14	992	70	40	2.5	3.5	25	19
5	3.5	14	55	25	25	1850	40	25	2.5	3.5	25	19
6	3.5	32	14	19	14	2860	7	14	1.7	3.5	19	28
7	2.5	47	47	115	19	420	7	32	1.7	3.5	14	32
8	2.0	130	85	235	25	152	7	19	2.0	2.5	14	32
9	2.1	130	47	442	32	62	62	10	130	2	14	40
10	2.0	182	6960	235	40	55	107	10	182	2	12	47
11	2.5	182	7760	175	55	40	130	7	77	2	12	51
12	3.5	160	7180	130	85	32	630	5	40	1.7	238	85
13	3.5	182	6420	235	115	343	678	5	47	1.7	493	3640
14	3.5	535	5400	2960	175	535	814	3.5	25	1.7	511	4620
15	5.0	1080	1180	5400	547	453	1600	2.5	14	2	250	4520
16	5.0	3500	235	4800	523	85	122	3.5	10	2	254	3930
17	2.0	646	122	4100	283	220	92	3.5	7	2	662	1560
18	2.5	420	77	1230	77	137	77	3.5	5	2.5	930	333
19	3.5	420	47	205	70	343	32	2.5	5	2.5	535	190
20	3.5	4260	32	1280	25	137	40	2.5	5	122	220	167
21	32	3380	14	4180	10	14	85	2.0	7	130	107	81
22	25	1460	32	4800	5.0	25	47	2.0	32	167	70	40
23	32	4100	14	5000	2.0	14	32	2.5	197	55	178	32
24	32	6420	10	4180	10	303	19	3.5	242	205	814	25
25	25	6110	19	3500	10	160	14	2.5	92	167	930	19
26	32	3930	25	1010	10	152	10	3.5	40	62	250	10
27	19	1460	19	535	992	145	10	3.5	25	37	137	12
28	14	376	205	55	1850	160	7	2.0	19	25	77	10
29	32	.....	92	32	323	107	10	1.7	10	19	47	8.5
30	14	.....	47	62	293	115	313	1.7	7	14	40	7
31	32	.....	25	.....	303	.....	464	1.7	.....	14	.....	6
Total.	349.1	39233	36607	45063	6031	10151	5818	816.1	1236.4	1082.6	6930	19609.5

Year period, 172926.7.

Little Wabash River.

Daily Discharge of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	5	115	6420	12	212	14
2	10	107	6530	12	85	10
3	12	92	6220	19	47	10
4	85	77	5700	22	130	8
5	115	152	4700	16	77	7
6	220	257	1810	40	55	19
7	250	145	431	40	32	55
8	216	77	235	36	182	47
9	137	58	156	32	212	32
10	40	55	111	28	130	25
11	19	55	92	25	92	12
12	14	51	55	22	100	12
13	250	47	47	25	235	10
14	3250	51	40	25	190	10
15	3710	47	36	19	167	10
16	3080	137	32	25	55	7
17	2550	167	25	382	40	7
18	2700	212	22	257	19	7
19	3860	250	19	208	2.2	6
20	3640	265	22	134	25	6
21	1430	387	19	104	19	5
22	814	796	19	77	16	5
23	726	1660	16	47	47	4.2
24	220	1080	16	77	614	4.2
25	167	814	16	152	487	4.2
26	131	431	19	167	227	4.2
27	175	4440	19	250	107	4.2
28	242	6320	16	354	85	3.5
29	265	.....	14	293	36	3.5
30	220	.....	14	250	25	4.2
31	160	.....	12	.....	19	.....
Total.	28698	18345	32883	3150	3769.2	356.2

Little Wabash River.

Rating Table for Skillet Fork River near Wayne City, Ill., for for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.
1.00	..	..	7.30	398	11	13.60	1665	35
1.10	..	..	7.40	409	11	13.70	1700	35
1.20	..	..	7.50	420	11	13.80	1735	35
1.30	..	..	7.60	431	11	13.90	1770	40
1.40	..	..	7.70	442	11	14.00	1810	40
1.50	..	.1	7.80	453	11	14.10	1850	40
1.60	1.1	.1	7.90	464	11	14.20	1890	40
1.70	1.2	.2	8.00	475	12	14.30	1930	40
1.80	1.4	.3	8.10	487	12	14.40	1970	40
1.90	1.7	.3	8.20	499	12	14.50	2010	40
2.00	2.0	.5	8.30	511	12	14.60	2050	40
2.10	2.5	1.0	8.40	523	12	14.70	2090	40
2.20	3.5	1.5	8.50	535	12	14.80	2130	45
2.30	5.0	2	8.60	547	12	14.90	2175	45
2.40	7.0	3	8.70	559	13	15.00	2220	45
2.50	10	4	8.80	572	14	15.10	2265	45
2.60	14	5	8.90	586	14	15.20	2310	45
2.70	19	6	9.00	600	14	15.30	2355	45
2.80	25	7	9.10	614	16	15.40	2400	50
2.90	32	8	9.20	630	16	15.50	2450	50
3.00	40	7	9.30	646	16	15.60	2500	50
3.10	47	8	9.40	662	16	15.70	2550	50
3.20	55	7	9.50	678	16	15.80	2600	50
3.30	62	8	9.60	694	16	15.90	2650	50
3.40	70	7	9.70	710	16	16.00	2700	50
3.50	77	8	9.80	726	16	16.10	2750	50
3.60	85	7	9.90	742	18	16.20	2800	55
3.70	92	8	10.00	760	18	16.30	2855	55
3.80	100	7	10.10	778	18	16.40	2910	55
3.90	107	8	10.20	796	18	16.50	2965	55
4.00	115	7	10.30	814	18	16.60	3020	55
4.10	122	8	10.40	832	18	16.70	3075	55
4.20	130	7	10.50	850	20	16.80	3130	60
4.30	137	8	10.60	870	20	16.90	3190	60
4.40	145	7	10.70	890	20	17.00	3250	60
4.50	152	8	10.80	910	20	17.10	3310	65
4.60	160	7	10.90	930	20	17.20	3375	65
4.70	167	8	11.00	950	21	17.30	3440	65
4.80	175	7	11.10	971	21	17.40	3505	65
4.90	182	8	11.20	992	22	17.50	3570	70
5.00	190	7	11.30	1014	22	17.60	3640	70
5.10	197	8	11.40	1036	22	17.70	3710	70
5.20	205	7	11.50	1058	24	17.80	3780	75
5.30	212	8	11.60	1082	24	17.90	3855	75
5.40	220	7	11.70	1106	24	18.00	3930	80
5.50	227	8	11.80	1130	25	18.10	4010	85
5.60	235	7	11.90	1155	25	18.20	4095	85
5.70	242	8	12.00	1180	25	18.30	4180	85
5.80	250	7	12.10	1205	25	18.40	4265	85
5.90	257	8	12.20	1230	25	18.50	4350	85
6.00	265	9	12.30	1255	25	18.60	4435	90
6.10	274	9	12.40	1280	30	18.70	4525	90
6.20	283	10	12.50	1310	30	18.80	4615	90
6.30	293	10	12.60	1340	30	18.90	4705	95
6.40	303	10	12.70	1370	30	19.00	4800	100
6.50	313	10	12.80	1400	30	19.10	4900	100
6.60	323	10	12.90	1430	30	19.20	5000	100
6.70	333	10	13.00	1460	30	19.30	5100	100
6.80	343	11	13.10	1490	35	19.40	5200	100
6.90	354	11	13.20	1525	35	19.50	5300	100
7.00	365	11	13.30	1560	35	19.60	5400	100
7.10	376	11	13.40	1595	35	19.70	5500	100
7.20	387	11	13.50	1630	35	19.80	5600	100

Rating Table for Skillet Fork River near Wayne City, Ill., for for 1908 to 1910—Concluded.

Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.
19.90	5700	100	20.70	6530	105	21.40	7300	115
20.00	5800	100	20.80	6635	105	21.50	7415	115
20.10	5900	105	20.90	6740	110	21.60	7530	115
20.20	6005	105	21.00	6850	110	21.70	7645	115
20.30	6110	105	21.10	6960	110	21.80	7760	120
20.40	6215	105	21.20	7070	115	21.90	7880	120
20.50	6320	105	21.30	7185	115	22.00	8000	...
20.60	6425	105						

The above table is not applicable for ice or obstructed channel conditions. It is based on 11 discharge measurements made during 1908,1909 and 1910, and is fairly well defined between gage heights 2.0 feet and 12.0 feet.

Little Wabash River.

Monthly Discharge of Skillet Fork River near Wayne City, Ill., for 1908 to 1910.

(Drainage Area 481 Square Miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
August 16-31	3.5	2.0	3.09	.0064	.004	B
September	2.0	1.1	1.58	.0033	.004	C
October	1.7	1.0	1.31	.0027	.003	C
November	19	1.1	2.35	.0049	.005	C
December	7.0	1.2	2.61	.0054	.006	C
1909						
January	32	2.0	11.3	.023	.03	B
February	6020	14	1400	2.91	3.03	B
March	7760	10	1180	2.45	2.82	B
April	5400	7	1500	3.12	3.48	B
May	1850	2	195	.405	.47	B
June	2850	11	338	.703	.78	B
July	1620	7	188	.391	.45	B
August	499	1.7	26.3	.055	.06	B
September	242	1.7	41.2	.086	.10	B
October	205	1.7	34.9	.073	.08	B
November	940	12	231	.480	.54	B
December	4020	2.0	633	1.32	1.52	B
The year	7760	1.7	482	1.00	13.36	.....
1910						
January	3860	5	926	1.93	2.22	B
February	6320	47	655	1.36	1.42	B
March	6530	12	1060	2.20	2.54	B
April	382	12	105	.218	.24	B
May	614	2.2	122	.254	.29	B
June	55	3.5	11.9	.025	.03	B

SANGAMON RIVER.

Description.

The drainage basin of the Sangamon river lies wholly within the State of Illinois. The river rises in the southwestern part of Ford county, flows southwest to Decatur in Macon county, thence flows westward until near Springfield, thence it flows northwestward to its junction with Salt creek at the northern boundary line of Menard county, thence it flows westward and empties into the Illinois river at the northern boundary of Cass county. Springfield is about twenty miles southwest of the center of the basin, which is roughly a right triangle in shape, with the mouth of the river opposite the vertical; the drainage basin lies very nearly in the center of the State. The river is about 180 miles in length, not including bends. The total drainage area is 5,410 square miles. The principal tributaries are Salt creek and South fork.

The eastern third of the drainage basin is somewhat undulating and elevated, the rest of the basin is a level prairie. The soil is a very fertile rich black loam, especially adapted for raising corn. There are coal mines in the vicinity of Springfield. The bed and banks of the river are soft and insecure. The slope of the river is small, the elevation of its source is about 700 feet above sea level, its mouth is about 430 feet. There are no forested areas in this drainage basin; what little timber there is is in small groves or along the river banks.

The annual rainfall is about 37 inches. The winter conditions are mild; ice forms to some extent and during severe winters attains considerable thickness.

Storage possibilities have not been investigated, although, as in the Kaskaskia basin, storage is of considerable interest.

On account of the low slope, floods, low water and lack of suitable foundations for dams, there are no opportunities for water power.

Owing to the levelness and lowness of the drainage area there is very little ground storage in the basin; high water follows every heavy rain, floods occur frequently and are of considerable duration. The banks of the river being low, large areas are flooded and there are numerous swamp areas in this basin. The drainage of these swamps and the opening up of channels so that flood waters may have an opportunity of returning quickly to the main stream makes the study of flood control and drainage of considerable importance. In some places short

sections of the main stream are being straightened in an effort to provide a better channel so that floods will quickly drain off the adjacent land. Any improvement of this nature should consider the stream as a whole and should be commenced at the lower end.

The following gaging stations are being maintained in this drainage basin:

Sangamon river near Monticello, 1908, 1909, 1910.
Sangamon river at Riverton, 1908, 1909, 1910.
Sangamon river near Oakford, 1909, 1910.
Sangamon river near Chandlerville, 1908.
South fork near Taylorville, 1908, 1909, 1910.
Salt creek near Kenney, 1908, 1909, 1910.

Sangamon River near Monticello, Ill.

This station is located at the I. C. Railroad bridge, about one-half mile west of Monticello, Ill. It was established Feb. 4, 1908, for the purpose of collecting data to be used in studying drainage, water supply, and flood control problems; and also for obtaining general statistical and comparative data.

There are no tributaries of any size near this station; the drainage area above the section is about 550 square miles.

The datum of the gage has not been changed; the records are reliable and accurate.

Sangamon River.

Discharge Measurements of Sangamon River near Monticello, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
April 9	R. J. Taylor	154	1111	1.27	9.25	1413
May 12	R. J. Taylor	366	2863	2.38	13.65	6828
July 26	R. J. Taylor	101	130	0.47	2.65	61
December 15	R. J. Taylor	67	64	0.21	2.05	13
1909						
March 20	Wm. M. O'Neill	137	417	0.67	4.83	281
March 24	Wm. M. O'Neill	125	351	0.63	4.35	222
May 20	H. J. Jackson	138	463	0.76	5.13	352
December 7	H. J Jackson	116	181	0.44	3.07	79
1910						
March 11	M. E. McChristie	140	491	0.79	5.38	3.89
March 11	M. E. McChristie	140	480	0.80	5.38	3.91
May 20	H. J. Jackson	161	1010	1.19	8.86	1200
May 27	H. J Jackson	152	773	0.99	7.46	767
May 28	H. J. Jackson	144	670	0.94	6.74	634

Sangamon River.

Daily Gage Height in Feet of Sangamon River near Monticello, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	9.9	6.6	10.0	7.3	3.1	2.2	2.0	1.9	2.0	2.2
2	.....	.....	10.0	6.7	9.1	6.8	3.7	2.2	1.9	1.9	2.0	2.2
3	.....	.....	10.5	6.5	8.5	6.4	3.3	2.2	1.9	1.9	2.0	2.2
4	.....	4.2	10.7	6.3	9.6	6.2	3.2	2.1	1.9	1.9	2.0	2.2
5	.....	6.1	10.7	6.2	11.3	6.0	3.1	2.1	1.9	1.8	2.0	2.2
6	.....	8.6	10.7	6.2	11.5	5.6	3.0	2.1	1.8	1.8	2.0	.....
7	.....	9.0	10.7	6.1	12.5	5.4	3.0	2.1	1.8	1.8	2.0	2.1
8	.....	8.3	10.8	6.8	13.5	5.1	2.9	2.1	1.8	1.8	2.0	2.1
9	.....	7.7	10.7	9.1	13.1	5.0	2.9	2.0	1.8	1.8	2.0	2.1
10	.....	6.9	10.2	9.4	12.8	4.9	2.9	2.0	1.8	1.8	2.0	2.0
11	.....	6.3	9.6	8.8	11.8	4.7	2.8	2.0	1.8	1.8	2.0	2.0
12	.....	7.3	9.2	8.2	13.6	4.5	2.8	2.0	1.8	1.8	2.0	2.0
13	.....	8.6	8.8	7.4	14.6	4.3	2.7	2.1	1.8	1.8	2.0	.....
14	.....	10.2	8.4	7.2	15.2	4.4	2.9	2.3	1.8	1.8	2.0	2.0
15	.....	11.2	8.0	6.9	14.0	4.4	3.1	2.2	1.8	1.8	2.0	2.0
16	.....	11.4	7.4	6.9	12.6	4.2	2.9	2.2	1.8	1.8	2.0	2.0
17	.....	12.0	7.1	7.0	11.7	4.0	2.8	2.2	1.8	1.8	2.0	2.0
18	.....	11.3	7.1	7.0	12.0	3.9	2.7	2.1	1.8	1.8	2.0	2.0
19	.....	10.2	8.0	6.8	11.6	3.8	2.6	2.0	1.8	1.8	2.0	2.0
20	.....	8.2	8.7	6.7	11.5	3.8	2.6	2.0	1.8	1.8	2.0	.....
21	.....	8.0	8.9	6.4	11.5	3.7	2.6	2.0	1.8	1.8	2.0	2.0
22	.....	7.7	8.5	6.0	11.6	3.5	2.6	2.0	1.8	1.9	2.0	2.0
23	.....	7.9	7.9	6.0	10.8	3.5	2.5	1.9	1.8	1.9	2.1	2.0
24	.....	7.4	7.3	8.0	10.1	3.4	2.5	1.9	1.8	1.9	2.1	2.0
25	.....	8.3	6.9	10.1	9.7	3.3	2.6	1.9	1.8	1.9	2.1	2.0
26	.....	10.1	6.6	10.5	9.2	3.2	2.6	1.9	1.8	1.9	2.2	2.0
27	.....	10.6	6.3	11.1	8.7	3.1	2.5	1.9	1.8	1.9	2.2	.....
28	.....	10.5	6.3	11.0	8.2	3.1	2.5	1.9	1.9	2.0	2.1	2.0
29	.....	10.5	6.9	10.8	8.1	3.2	2.4	1.9	1.9	2.0	.....	2.0
30	.....	.....	6.4	10.7	8.0	3.2	2.3	1.9	1.9	2.0	2.3	2.3
31	.....	.....	6.6	.....	7.8	.....	2.3	1.9	.....	2.0	.....	2.4

Sangamon River.

Daily Gage Height in Feet of Sangamon River near Monticello, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.4	2 5	8.6	4 25	9 25	6.55	3.85	.....	2 2	2.0	2.35	3.25
2	2 3	2 4	8.1	4.15	.....	6.4	3.6	3.1	2.1	2.0	3.4	3.2
3	.....	2 4	7.7	4.2	8.55	6.85	3.5	3.0	2.2	.....	2.35	3.15
4	2 3	2 4	7 1	.....	7.6	7.4	.....	2.95	2 2	2.0	2.35	3.1
5	2 3	2 6	6.7	4.1	7.0	7.3	3.55	2.95	.....	2.0	2.35	.....
6	2.0	2 7	6.4	4.3	6 6	.....	3.8	2.9	2.1	2.0	2.3	3.5
7	2 0	.....	.....	8 4	6.05	5 8	7 8	2 8	2.1	2.0	.....	3.5
8	2 0	3 2	5 8	9 8	6 1	5.35	8.5	.....	2.1	1.95	2.35	3.5
9	2 0	3 2	5 9	9.1	7.95	8 55	8.2	2 6	2.1	1 95	2 3	2.8
10	.....	3 8	6.3	7.6	9 15	8 4	7.2	2.55	2.1	.....	2.3	2.8
11	2 0	4 8	6.5	.....	9.35	7.15	9 2	2.5	2.1	2 0	2 3	2.8
12	2 1	4 8	6.2	6.2	8.95	6.9	14 85	2 45	.....	2 0	2.7	.....
13	2 1	4 6	5.9	9.95	8.1	.....	13.15	2.4	2.05	2.0	2.9	3.7
14	2.1	4 9	.....	10.9	7 5	9 7	10 95	2.4	2 0	.....	.....	4 3
15	2 1	.....	5 4	10 9	6 9	7 9	9 1	.....	2.1	2 1	2 9	4 3
16	2 1	7 2	5 2	10 15	.....	6.3	7.8	2.4	1 95	2 0	4 4	4 35
17	.....	8 5	5 0	9.2	6.1	5 75	6.9	2 3	1 95	.....	5 0	4 4
18	2.1	8 0	4 7	.....	5.7	5 2	.....	2 3	1.95	2 3	4 5	4 25
19	2 0	7 8	4 9	8 55	5 4	4 9	5 7	2.25	.....	2 15	4.7	4 2
20	2 0	8 0	4 9	8 75	5 2	.....	5 2	2 2	2 0	2 2	4 25	3 9
21	2 1	9 0	.....	9 8	5.05	4 4	5 0	2 2	2 0	2.25	.....	3.7
22	2 4	.....	4 6	10.5	4 8	5 3	4 75	.....	2 4	2.3	3.7	3 6
23	2 5	9 8	4 5	10 4	.....	5 3	4.3	2 0	2 1	2 1	3.8	3.5
24	.....	10 1	4 3	10 0	4.45	4 8	4 15	2.1	2.25	.....	3 8	3.4
25	2 3	10 85	4 7	.....	4 9	4 5	.....	2.1	2.2	2.4	3 95	3.5
26	2 35	11 1	5 0	8 65	6 6	4 4	3 8	2.9	.....	2.35	3.85	3.2
27	2 3	11 1	5.2	8 0	8 2	.....	3 8	3 0	2 1	2.3	3.7	3.25
28	2 3	10 3	.....	7.4	9 0	4 8	3 7	2 45	2 1	2.3	.....	3 25
29	2 6	.....	4 85	7 05	7 9	4 1	3 6	.....	2.1	2 3	3 4	3 1
30	2 5	.....	4 6	8 7	.....	4 1	3 15	2 2	2 0	2 25	3 3	3.1
31	.....	.....	4 1	.....	6 4	.....	3.35	2 2	.....	.....	.....	3 1

Gage heights Jan. 6, 7, 30, Dec. 8-10, 1831 are to top of ice.

Sangamon River.

Daily Gage Height in Feet of Sangamon River near Monticello, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	3.1	5.7	9.0	3.35	.....	6.3
2	3.3	5.4	8.5	3.3	3.75	5.6
3	3.35	5.9	7.4	.....	4.0	5.2
4	3.35	6.1	6.6	3.35	4.2	4.9
5	3.35	6.2	6.5	3.35	4.0	.....
6	3.35	.....	.....	3.4	3.7	4.45
7	3.35	5.15	6.9	3.3	3.85	4.25
8	3.25	5.0	6.7	3.25	.....	4.0
9	.....	5.2	6.2	3.15	4.3	3.6
10	3.1	4.8	5.75	.....	4.3	3.8
11	3.1	4.6	5.4	3.1	4.3	3.65
12	3.15	4.1	5.2	3.1	4.4	.....
13	5.6	.....	.....	3.05	4.45	3.4
14	8.35	4.25	4.8	3.0	4.3	3.3
15	8.7	4.3	4.6	3.0	.....	3.2
16	.....	4.3	4.45	3.05	3.95	3.1
17	7.7	3.6	4.3	.....	3.8	3.05
18	9.5	4.3	4.25	3.2	3.7	3.0
19	9.7	4.9	4.15	3.2	3.6	.....
20	10.0	4.0	.....	3.15	3.65	2.8
21	10.2	4.0	4.0	3.1	3.75	2.75
22	10.2	4.0	3.95	3.1	.....	2.7
23	.....	3.9	3.85	3.1	7.2	2.6
24	9.65	3.8	3.8	.....	8.85	2.6
25	8.7	3.6	3.7	3.1	9.45	2.5
26	7.7	3.95	3.7	3.2	9.15	.....
27	7.3	.....	.....	3.25	7.3	4.0
28	7.2	9.45	3.7	3.4	6.8	6.45
29	7.25	.....	3.6	3.75	.....	5.6
30	5.85	.....	3.6	3.7	6.4	4.6
31	5.85	.....	.....	.....	6.7	.....

Gage heights Jan. 1-12 were affected by ice conditions.

Sangamon River.

Daily Discharge of Sangamon River near Monticello, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	1830	619	1920	756	82	20	11	8	11	20
2	.....	.....	1920	638	1280	657	138	20	8	8	11	20
3	.....	.....	2430	600	1070	581	99	20	8	8	11	20
4	.....	194	2650	562	1580	543	90	15	8	8	11	20
5	.....	524	2650	543	3360	505	82	15	8	6	11	20
6	.....	1100	2650	543	3600	429	74	15	6	6	11	18
7	.....	1240	2650	524	4970	392	74	15	6	6	11	15
8	.....	1010	2760	657	6560	338	66	15	6	6	11	15
9	.....	846	2650	1280	5920	320	66	11	6	6	11	15
10	.....	676	2120	1450	5440	302	66	11	6	6	11	11
11	.....	562	1580	1170	3990	268	58	11	6	6	11	11
12	.....	756	1330	976	6720	236	58	11	6	6	11	11
13	.....	1100	1170	777	8320	208	50	15	6	6	11	11
14	.....	2120	1040	735	9280	222	66	25	6	6	11	11
15	.....	3240	920	676	7360	222	82	20	6	6	11	11
16	.....	3480	777	676	5120	194	66	20	6	6	11	11
17	.....	4250	715	695	3860	170	58	20	6	6	11	11
18	.....	3360	715	695	4250	159	50	15	6	6	11	11
19	.....	2120	920	657	3730	148	43	11	6	6	11	11
20	.....	976	1130	638	3600	148	43	11	6	6	11	11
21	.....	920	1200	581	3600	138	43	11	6	6	11	11
22	.....	846	1070	505	3730	118	43	11	6	8	11	11
23	.....	895	895	505	2760	118	37	8	6	8	15	11
24	.....	777	756	920	2020	108	37	8	6	8	15	11
25	.....	1010	676	2020	1660	99	43	8	6	8	15	11
26	.....	2020	619	2410	1330	90	43	8	6	8	20	11
27	.....	2540	562	3120	1130	82	37	8	6	8	23	11
28	.....	2430	562	3000	976	82	37	8	8	11	15	11
29	.....	2430	676	2760	918	90	31	8	8	11	20	11
30	.....	.....	581	2650	920	90	25	8	8	11	25	25
31	.....	.....	619	.....	870	.....	25	8	.....	11	.....	31
Total	.....	40903	42823	33602	111874	7813	1812	410	199	226	387	439

Discharge on days when gage height is missing was obtained by interpolation

Sangamon River.

Daily Discharge of Sangamon River near Monticello, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	31	20	1100	201	1360	610	154	93	20	11	28	94
2	25	31	948	188	1220	581	128	82	15	11	108	90
3	25	31	846	194	1080	666	118	74	20	11	28	86
4	25	31	715	188	822	777	120	70	20	11	28	82
5	25	43	638	182	695	756	123	70	18	11	28	100
6	8	50	581	208	619	612	148	66	15	11	25	118
7	6	70	524	1040	514	467	870	58	15	11	26	118
8	6	90	467	1740	524	383	1070	50	15	10	28	80
9	6	148	486	1280	907	1080	976	43	15	10	25	50
10	6	284	562	822	1300	1040	735	40	15	10	25	40
11	6	284	600	682	1420	725	1330	37	15	11	25	50
12	8	252	543	543	1220	676	8720	34	14	11	50	100
13	8	302	486	1880	948	1170	6000	31	13	11	66	138
14	8	518	439	2880	799	1660	2940	31	11	13	66	208
15	8	735	392	2880	676	895	1280	31	15	15	66	208
16	10	1070	356	2070	600	562	870	31	10	11	222	215
17	10	920	320	1330	524	458	676	25	10	18	320	222
18	10	870	268	1200	448	356	562	25	10	25	236	180
19	11	920	302	1080	392	302	448	22	10	18	268	150
20	11	1240	302	1150	356	262	356	20	11	20	201	130
21	15	1490	277	1740	329	222	320	20	11	22	170	120
22	31	1740	252	2430	284	374	276	16	31	25	138	100
23	37	2020	236	2320	256	374	208	11	31	31	148	80
24	30	2820	208	1920	229	284	188	15	22	31	148	70
25	23	3120	268	1520	302	236	168	15	20	31	164	60
26	28	3120	320	1120	619	222	148	66	18	28	153	50
27	25	2220	356	920	976	253	148	74	15	25	138	50
28	25	1660	325	777	1240	284	138	34	15	25	123	40
29	20	.....	293	705	895	222	128	27	15	25	108	40
30	20	.....	252	1130	738	182	113	20	11	22	99	30
31	15	.....	222	.....	581	.....	104	20	.....	25	.....	30
Total.	522	26099	13884	36320	22873	16691	29563	1251	476	550	3258	3129

Discharges on those days on which there are no gage heights were obtained by interpolation. Discharge Jan. 6-18, 29-31, Feb. 1, Dec. 8-12 and 18-31 was estimated from the gage readings, climatological and other data.

Year period 154616.

Sangamon River.

Daily Discharge of Sangamon River near Monticello, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	.....	448	1240	104	140	562
2	.....	392	1070	99	143	429
3	.....	486	777	102	170	356
4	.....	524	619	104	194	302
5	.....	543	600	104	170	266
6	.....	445	638	108	138	229
7	.....	347	676	99	160	201
8	.....	320	638	94	482	170
9	.....	356	543	86	208	128
10	.....	284	458	84	208	148
11	.....	252	392	82	208	133
12	.....	182	356	82	222	120
13	429	192	320	78	229	108
14	1020	201	284	74	208	99
15	1130	208	252	74	186	90
16	988	208	229	78	164	82
17	846	128	208	84	148	78
18	1510	208	201	90	138	74
19	1660	302	188	90	128	66
20	1920	170	179	86	133	58
21	2120	170	170	82	143	54
22	2120	170	164	82	439	50
23	1870	159	154	82	735	43
24	1620	148	148	82	1190	43
25	1130	128	138	82	1480	37
26	846	164	138	90	1300	104
27	756	638	138	94	756	170
28	735	1480	138	108	657	590
29	746	.....	128	143	629	429
30	476	.....	128	138	581	252
31	476	.....	121	.....	638	.....
Total	(13-31) 22348	9253	11433	2785	12025	5471

Discharge on days when gage height is missing was obtained by interpolation

Sangamon River.

Rating Table for Sangamon River near Monticello, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.00	..	4.80	284	8.60	1100	12.40	4820
1.10	..	4.90	302	8.70	1134	12.50	4970
1.20	..	5.00	320	8.80	1168	12.60	5120
1.30	..	5.10	338	8.90	1204	12.70	5280
1.40	..	5.20	356	9.00	1240	12.80	5440
1.50	..	5.30	374	9.10	1280	12.90	5600
1.60	..	5.40	392	9.20	1330	13.00	5760
1.70	..	5.50	410	9.30	1390	13.10	5920
1.80	6	5.60	429	9.40	1450	13.20	6080
1.90	8	5.70	448	9.50	1510	13.30	6240
2.00	11	5.80	467	9.60	1580	13.40	6400
2.10	15	5.90	486	9.70	1660	13.50	6560
2.20	20	6.00	505	9.80	1740	13.60	6720
2.30	25	6.10	524	9.90	1830	13.70	6880
2.40	31	6.20	543	10.00	1920	13.80	7040
2.50	37	6.30	562	10.10	2020	13.90	7200
2.60	43	6.40	581	10.20	2120	14.00	7360
2.70	50	6.50	600	10.30	2220	14.10	7520
2.80	58	6.60	619	10.40	2320	14.20	7680
2.90	66	6.70	638	10.50	2430	14.30	7840
3.00	74	6.80	657	10.60	2540	14.40	8000
3.10	82	6.90	676	10.70	2650	14.50	8160
3.20	90	7.00	695	10.80	2760	14.60	8320
3.30	99	7.10	715	10.90	2880	14.70	8480
3.40	108	7.20	735	11.00	3000	14.80	8640
3.50	118	7.30	756	11.10	3120	14.90	8800
3.60	128	7.40	777	11.20	3240	15.00	8960
3.70	138	7.50	799	11.30	3360	15.10	9120
3.80	148	7.60	822	11.40	3480	15.20	9280
3.90	159	7.70	846	11.50	3600	15.30	9440
4.00	170	7.80	870	11.60	3730	15.40	9600
4.10	182	7.90	895	11.70	3860	15.50	9760
4.20	194	8.00	920	11.80	3990	15.60	9920
4.30	208	8.10	948	11.90	4120	15.70	10080
4.40	222	8.20	976	12.00	4250	15.80	10240
4.50	236	8.30	1006	12.10	4390	15.90	10400
4.60	252	8.40	1036	12.20	4530	16.00	10560
4.70	268	8.50	1068	12.30	4670		

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 13 discharge measurements made during 1908-1910, and is well defined between gage heights 2.0 and 9.3 feet. Above gage height 12.6 feet the rating curve is a tangent fairly well to 13.6, the difference being 160 per tenth.

Sangamon River.

Monthly Discharge of Sangamon River near Monticello, Ill., for 1908 to 1910.

(Drainage area 550 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
January						
February 4-29	4250	194	1890	3.44	3.33	B
March	2760	562	1380	2.51	2.89	B
April	3120	505	1120	2.04	2.28	B
May	9280	870	3610	6.56	7.56	B
June	756	82	260	.473	.53	A
July	138	25	58.5	.106	.12	A
August	25	8	13.2	.024	.03	B
September	11	6	6.63	.012	.01	C
October	11	6	7.29	.013	.01	C
November	25	11	12.9	.024	.03	B
December	31	11	14.2	.026	.03	B
The year						
1909						
January	37		16.8	.031	.04	C
February	3120		932	1.69	1.76	B
March	1100	208	44.8	.815	.94	A
April	2880	182	1210	2.20	2.46	B
May	1420	229	738	1.34	1.54	A
June	1660	182	556	1.01	1.13	A
July	8720	104	954	1.73	1.99	B
August	93	11	40.4	.074	.09	A
September	31	10	15.9	.029	.03	B
October	31	10	17.7	.032	.04	B
November	320	25	109	.198	.22	A
December			191	.184	.21	C
The year			428	.778	10.45	
1910						
January 13-31	2120	429	1176	2.14	1.51	B
February	1480	128	330	.600	.62	A
March	1240	121	369	.671	.77	A
April	143	74	92.8	.169	.19	A
May	1480	128	388	.705	.81	A
June	590	37	182	.331	.37	A

Sangamon River at Riverton, Ill.

This station is located on the Wabash Railroad bridge, about one-fourth mile west of the depot at Riverton, Ill. It was established Feb. 13, 1908, to obtain data to be used in the study of drainage and flood control problems, and also to obtain general statistical and comparative data.

The South fork is tributary two or three miles above the station; the drainage area above the section is about 2,560 square miles.

The datum of the gage has not been changed; the records are reliable and accurate.

The high water of 1883 reached a height of approximately 32 feet on the present gage. The high water of 1875 is said to have been about one-half foot lower than the flood of 1883.

Sangamon River.

Discharge Measurements of Sangamon River at Riverton, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
February 13	R. J. Taylor	218	2202	1.70	16.50	3755
July 27	R. J. Taylor	151	733	0.45	8.4	326
1909						
February 7	R. J. Taylor	157	856	0.46	9.37	397
March 18	Wm. M. O'Neill	181	1360	1.09	12.27	1477
March 23	Wm. M. O'Neill	175	1167	0.94	11.33	1092
May 18	H. J. Jackson	197	1758	1.39	14.56	2437
November 26	H. J. Jackson	180	1211	1.03	11.97	1247
1910						
March 16	M. E. McChristie	179	1191	1.03	11.88	1222
May 16	H. J. Jackson	212	2100	1.58	16.47	3320
May 20	H. J. Jackson	184	1320	1.14	12.83	1510
May 31	H. J. Jackson	222	2350	1.59	17.54	3750
June 2	H. J. Jackson	200	1790	1.41	15.02	2520

Sangamon River.

Daily Gage Height in Feet of Sangamon River at Riverton, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	22.1	15.9	20.4	16.2	9.5	8.0	7.6	7.0	6.7	7.1
2	.....	.....	21.9	16.0	19.8	15.1	9.4	7.9	7.6	7.0	6.7	7.1
3	.....	.....	21.7	16.1	19.4	14.3	9.2	7.9	7.5	6.9	6.7	7.1
4	.....	.....	21.5	16.0	21.8	13.8	9.0	7.8	7.5	6.9	6.6	7.1
5	.....	.....	21.3	15.8	23.1	13.5	9.0	7.8	7.4	6.9	6.6	7.1
6	.....	.....	21.6	15.7	23.8	13.2	8.9	7.7	7.3	6.9	6.6	7.1
7	.....	.....	21.5	16.0	24.8	12.9	9.7	7.7	7.3	6.9	6.6	7.1
8	.....	.....	21.6	16.4	26.3	12.5	10.6	7.7	7.2	6.9	6.6	7.1
9	.....	.....	22.1	16.7	26.4	12.0	10.5	7.7	7.2	6.9	6.6	7.1
10	.....	.....	22.3	16.9	26.0	11.9	10.0	7.7	7.2	6.9	6.6	7.1
11	.....	.....	22.1	17.1	25.8	11.7	9.5	7.7	7.2	6.9	6.6	7.1
12	.....	.....	21.9	17.1	25.4	11.5	9.3	7.7	7.2	6.9	6.6	7.1
13	.....	16.5	21.7	17.0	24.8	11.4	9.1	7.7	7.2	6.9	6.6	7.1
14	.....	18.0	21.5	16.9	24.3	11.0	8.9	7.7	7.2	6.8	6.6	7.1
15	.....	19.9	21.0	16.4	23.3	10.8	8.7	7.7	7.2	6.8	6.6	7.1
16	.....	20.0	20.7	15.9	23.2	10.6	8.7	7.7	7.2	6.8	6.6	7.1
17	.....	20.9	19.5	15.1	23.4	10.4	8.6	7.7	7.1	6.8	6.7	7.1
18	.....	20.5	17.1	14.5	23.5	10.3	8.6	7.6	7.1	6.8	6.8	7.1
19	.....	20.0	16.5	14.0	23.1	10.2	8.5	7.6	7.0	6.8	6.8	7.1
20	.....	20.4	16.0	13.9	22.6	9.9	8.5	7.6	6.9	6.8	6.8	7.1
21	.....	20.5	15.5	13.4	22.1	9.8	8.5	7.6	6.9	6.7	6.8	7.1
22	.....	20.5	15.1	13.4	22.6	9.6	8.5	7.5	7.0	6.7	6.8	7.1
23	.....	20.1	14.9	13.9	22.4	9.5	8.5	7.4	7.0	6.7	6.9	7.1
24	.....	20.0	14.7	14.9	22.2	9.4	8.6	7.4	7.0	6.7	6.9	7.1
25	.....	20.6	14.4	16.0	22.0	9.3	8.6	7.3	7.0	6.7	7.0	7.1
26	.....	21.7	14.3	18.6	21.9	9.2	8.5	7.3	7.0	6.7	7.0	7.1
27	.....	22.1	14.6	19.7	21.4	9.1	8.5	7.2	7.0	6.7	7.1	7.1
28	.....	22.0	15.0	21.1	20.5	9.0	8.4	7.2	7.0	6.7	7.1	7.1
29	.....	21.8	15.6	20.9	19.7	9.0	8.3	7.2	7.0	6.7	7.1	7.1
30	.....	.....	15.9	20.7	19.0	9.6	8.2	7.1	7.0	6.7	7.1	7.1
31	.....	.....	16.1	.....	17.9	.....	8.1	7.4	.....	6.7	.....	7.1

Sangamon River.

Daily Gage Height in Feet of Sangamon River at Riverton, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.1	8.2	.....	11.0	16.5	20.0	10.7	10.5	7.8	8.0	8.4	10.9
2	7.1	8.4	.....	10.9	16.0	19.0	10.0	10.4	7.8	8.0	8.4	10.6
3	7.1	8.6	17.2	10.9	15.8	19.0	9.8	10.3	7.8	8.0	8.5	10.55
4	7.1	8.6	16.4	10.9	15.6	19.25	9.6	10.2	7.8	8.0	8.5	10.45
5	7.1	8.7	15.7	10.9	15.2	18.0	10.1	10.1	7.8	8.0	8.5	10.2
6	7.1	8.9	15.0	10.8	15.0	16.9	13.7	9.9	7.8	8.0	8.5	10.2
7	7.1	9.0	14.7	10.8	14.8	15.8	20.5	9.8	7.8	8.0	8.5	10.15
8	7.1	9.4	13.9	10.9	14.9	15.4	19.9	9.8	7.8	8.0	8.6	9.7
9	7.1	9.6	12.5	11.4	15.1	15.65	19.9	9.8	7.7	8.0	8.8	9.3
10	7.1	9.9	12.4	12.1	16.5	14.95	19.5	9.7	7.7	8.0	8.9	9.6
11	7.1	10.4	12.0	12.6	16.4	14.5	19.0	9.5	7.7	8.0	9.0	9.8
12	7.1	10.5	11.8	12.9	17.2	14.5	20.5	9.3	7.6	8.0	9.0	10.0
13	7.1	10.8	11.5	13.2	18.5	14.7	22.5	9.2	7.6	8.0	9.05	10.3
14	7.1	10.9	11.9	13.8	18.4	14.9	23.7	8.9	7.6	8.0	9.05	10.9
15	7.1	11.0	12.0	14.0	18.3	13.7	24.3	8.7	7.6	8.0	.....	11.8
16	7.1	11.2	12.1	14.4	18.0	13.1	24.0	8.7	7.9	8.0	.....	12.4
17	7.1	14.0	12.1	15.9	17.4	12.9	22.0	8.4	8.0	8.0	.....	13.0
18	7.1	15.1	11.9	16.9	16.9	12.7	21.0	8.3	8.0	8.0	.....	12.9
19	7.1	16.0	11.8	18.4	16.2	12.1	20.5	8.1	8.0	8.4	.....	12.4
20	7.2	17.0	11.6	19.5	15.4	11.8	19.4	8.1	8.2	8.5	11.8	12.0
21	7.3	18.0	11.6	20.8	14.4	11.6	18.0	8.0	8.2	8.5	.....	11.7
22	7.3	18.6	11.5	21.9	13.4	11.3	17.2	7.9	8.1	8.5	.....	11.7
23	7.3	19.4	11.5	22.6	12.6	11.2	16.5	7.8	8.1	8.4	.....	11.4
24	7.4	19.6	11.4	22.3	11.7	11.0	15.2	7.8	8.1	8.4	.....	11.15
25	7.5	.....	11.3	22.0	13.0	10.7	14.0	7.7	8.0	8.4	.....	10.9
26	7.5	.....	11.3	21.4	14.05	11.0	13.1	7.7	8.0	8.4	12.0	10.7
27	7.5	.....	11.2	20.5	15.6	11.6	12.7	7.7	8.0	8.4	11.9	10.5
28	7.5	.....	11.25	19.0	16.4	11.8	11.6	7.6	8.0	8.3	11.65	10.4
29	7.6	.....	11.1	18.1	17.5	11.6	11.2	7.6	8.0	8.3	11.4	10.2
30	7.6	.....	11.0	17.5	17.5	11.4	10.8	7.6	8.0	8.3	11.0	10.0
31	7.9	.....	11.0	.....	19.0	.....	10.6	7.6	.....	8.3	.....	10.0

Gage heights Dec. 8-10, Dec. 22-31 were affected by ice conditions.

Sangamon River.

Daily Gage Height in Feet of Sangamon River at Riverton, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	10.0	13.8	17.4	10.0	10.6	16.55
2	10.0	13.3	18.1	9.95	10.45	15.1
3	10.1	13.0	18.5	9.0	10.8	14.2
4	10.5	12.9	19.0	9.0	14.6	13.5
5	10.5	12.85	19.3	10.2	15.15	12.9
6	10.25	12.8	19.0	10.4	14.6	12.7
7	10.2	12.7	18.1	10.6	13.95	12.5
8	10.2	12.6	17.1	10.4	13.9	12.1
9	10.3	12.4	16.0	10.2	14.5	11.7
10	10.5	12.1	15.1	10.0	14.55	12.0
11	10.4	12.0	14.2	9.9	14.5	13.1
12	10.1	11.8	13.6	9.8	16.75	11.6
13	10.8	11.7	13.0	9.7	18.0	11.0
14	14.5	11.2	12.6	9.6	17.8	10.65
15	15.9	11.1	12.2	9.6	17.0	10.5
16	16.2	11.2	12.0	9.5	16.6	10.4
17	16.0	10.7	11.8	10.05	15.6	10.3
18	18.4	9.8	11.5	10.4	14.8	10.0
19	20.2	10.2	11.4	11.0	13.6	9.8
20	21.05	10.7	11.2	11.05	12.9	9.7
21	21.2	10.8	11.1	10.7	12.6	10.1
22	21.0	10.5	11.0	10.45	13.2	9.6
23	21.0	10.55	10.9	10.2	14.25	9.3
24	20.7	10.3	10.8	10.0	17.8	9.2
25	20.3	10.1	10.7	9.9	19.5	9.1
26	19.8	10.4	10.5	9.9	20.05	9.1
27	19.1	13.2	10.4	10.05	20.2	10.2
28	18.5	15.9	10.3	10.4	19.9	14.8
29	17.0	.....	10.3	10.5	19.6	14.7
30	15.6	.....	10.3	10.65	19.2	13.4
31	14.5	.....	10.1	.....	18.1	.....

Gage heights Jan. 1, 2 and 3 were affected by ice conditions.

Sangamon River.

Daily Discharge of Sangamon River at Riverton, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	8010	3140	6220	3320	460	190	148	92	67	101
2	.....	.....	7790	3200	5660	2700	435	179	148	92	67	101
3	.....	.....	7570	3260	5340	2260	388	179	138	83	67	101
4	.....	.....	7350	3200	7680	2000	344	168	138	83	60	101
5	.....	.....	7130	3090	9180	1870	344	168	128	83	60	101
6	.....	.....	7460	3040	10000	1750	324	158	119	83	60	101
7	.....	.....	7350	3200	11200	1620	513	158	119	83	60	101
8	.....	.....	7460	3430	13000	1460	792	158	110	83	60	101
9	.....	.....	8010	3610	13100	1280	760	158	110	83	60	101
10	.....	.....	8230	3720	12700	1240	603	158	110	83	60	101
11	.....	.....	8010	3840	12400	1170	460	158	110	83	60	101
12	.....	.....	7790	3840	11900	1100	411	158	110	83	60	101
13	.....	3490	7570	3780	11200	1060	366	158	110	83	60	101
14	.....	4370	7350	3720	10600	920	324	158	110	75	60	101
15	.....	5740	6820	3430	9420	856	287	158	110	75	60	101
16	.....	5830	6520	3140	9300	792	287	158	110	75	60	101
17	.....	6720	5420	2700	9540	728	270	158	101	75	67	101
18	.....	6320	3840	2380	9660	696	270	148	101	75	75	101
19	.....	5830	3490	2100	9180	665	254	148	92	75	75	101
20	.....	6220	3200	2050	8580	572	254	148	83	75	75	101
21	.....	6320	2920	1830	8010	542	254	148	83	67	75	101
22	.....	6320	2760	1830	8380	486	254	138	92	67	75	101
23	.....	5920	2660	2050	8340	460	254	128	92	67	83	101
24	.....	5830	2480	2660	8120	435	270	128	92	67	83	101
25	.....	6420	2320	3200	7900	411	270	119	92	67	92	101
26	.....	7570	2260	4760	7790	388	254	119	92	67	92	101
27	.....	8010	2430	5580	7240	366	254	110	92	67	101	101
28	.....	7900	2650	6920	6320	344	240	110	92	67	101	101
29	.....	7680	2980	6720	5580	344	227	110	92	67	101	101
30	.....	.....	3140	6520	5040	486	214	101	92	67	101	101
31	.....	.....	3260	.....	4310	.....	202	128	.....	67	.....	.....
Total.	.....	106490	166110	105880	273090	32321	10839	4563	3216	2359	2177	3131

Sangamon River.

Daily Discharge of Sangamon River at Riverton, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	101	214	4350	920	3490	5830	824	760	168	190	240	888
2	101	240	4120	888	3200	5040	603	728	168	190	240	792
3	101	270	3900	888	3090	5040	542	696	168	190	254	776
4	101	270	3430	888	2980	5230	486	665	168	190	254	744
5	101	287	3040	888	2760	4370	634	634	168	190	254	665
6	101	324	2650	856	2650	3720	1960	572	168	190	254	665
7	101	344	2480	856	2540	3090	6320	542	168	190	254	650
8	101	435	2050	888	2600	2870	5740	542	168	190	270	400
9	101	486	1460	1060	2700	3010	5740	542	158	190	305	300
10	101	572	1420	1310	3490	2620	5420	513	158	190	324	400
11	101	728	1280	1500	3430	2380	5040	460	158	190	344	542
12	101	760	1200	1620	3900	2380	6320	411	148	190	344	603
13	101	856	1100	1750	4690	2480	8460	388	148	190	355	696
14	101	888	1240	2000	4620	2600	9900	324	148	190	355	888
15	101	920	1280	2100	4560	1960	10600	287	148	190	400	1200
16	101	990	1310	2320	4370	1710	10300	287	179	190	800	1420
17	101	2100	1310	3140	4010	1620	7900	240	190	190	1000	1660
18	101	2700	1240	3720	3610	1540	6820	227	190	190	1200	1620
19	101	3200	1200	4620	3320	1310	6320	202	190	240	1200	1420
20	110	3780	1130	5420	2870	1200	5340	202	214	254	1200	1280
21	119	4370	1130	6620	2320	1130	4370	190	214	254	1200	1170
22	119	4760	1100	7790	1830	1020	3900	179	202	254	1220	1000
23	119	5340	1100	8580	1500	990	3490	168	202	240	1240	800
24	128	5500	1060	8230	1170	920	2760	168	202	240	1260	700
25	138	5270	1020	7900	1660	824	2100	158	190	240	1280	600
26	138	5040	1020	7240	2130	920	1710	158	190	240	1280	500
27	138	4810	990	6320	2980	1130	1540	158	190	240	1240	500
28	138	458	1010	5040	3430	1200	1130	148	190	227	1150	400
29	148	.....	955	4430	4070	1130	990	148	190	227	1060	400
30	148	.....	920	4070	4070	1060	856	148	190	227	920	300
31	179	.....	920	.....	5040	.....	792	148	.....	227	.....	300
Total.	3541	60034	52415	103852	99080	70324	128907	10993	5333	6530	21697	24279

Year period, 586985. Discharge Feb. 25, Mar. 2, Nov. 15-19, 21-25, Dec. 8-10, 22-31 was estimated from gage readings, climatological and other data.

Sangamon River.

Daily Discharge of Sangamon River at Riverton, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	300	2000	4010	603	792	3520
2	400	1790	4430	588	744	2700
3	500	1660	4690	344	856	2210
4	760	1620	5040	344	2430	1870
5	760	1600	5260	665	2730	1620
6	680	1580	5040	728	2430	1540
7	665	1540	4430	792	2080	1460
8	665	1500	3840	728	2050	1310
9	696	1420	3200	665	2380	1170
10	760	1310	2700	603	2400	1280
11	728	1280	2210	572	2380	1710
12	634	1200	1920	542	3640	1130
13	856	1170	1660	513	4370	920
14	2380	990	1500	486	4250	808
15	3140	955	1350	486	3780	760
16	3320	990	1280	460	3550	728
17	3200	824	1200	618	2980	696
18	4620	542	1100	728	2540	603
19	6020	665	1060	920	1920	542
20	6870	824	990	938	1620	513
21	7020	856	955	824	1500	634
22	6820	760	920	744	1750	486
23	6820	776	888	665	2240	411
24	6520	696	856	603	4250	388
25	6120	634	824	572	5420	366
26	5660	728	760	572	5880	366
27	5120	1750	728	618	6020	665
28	4690	3140	696	728	5740	2540
29	3780	.....	696	760	5500	2480
30	2980	.....	696	808	5190	1830
31	2380	.....	634	.....	4430	.....
Total	95864	34901	65563	19217	97842	37256

Discharge Jan. 1, 2 and 3 was estimated from gage heights, climatological and other data.

Sangamon River.

Rating Table for Sangamon River at Riverton, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Difference—Sec. ft.
6.00	..	..	11.70	1167	36	17.40	4012	58
6.10	..	..	11.80	1203	36	17.50	4070	60
6.20	..	..	11.90	1239	36	17.60	4130	60
6.30	..	..	12.00	1275	37	17.70	4190	60
6.40	..	..	12.10	1312	37	17.80	4250	60
6.50	..	..	12.20	1349	38	17.90	4310	60
6.60	60	7	12.30	1387	38	18.00	4370	60
6.70	67	8	12.40	1425	39	18.10	4430	60
6.80	75	8	12.50	1464	39	18.20	4490	65
6.90	83	9	12.60	1503	40	18.30	4555	65
7.00	92	9	12.70	1543	40	18.40	4620	70
7.10	101	9	12.80	1583	41	18.50	4690	70
7.20	110	9	12.90	1624	41	18.60	4760	70
7.30	119	9	13.00	1665	41	18.70	4830	70
7.40	128	10	13.10	1706	41	18.80	4900	70
7.50	138	10	13.20	1747	41	18.90	4970	70
7.60	148	10	13.30	1788	42	19.00	5040	75
7.70	158	10	13.40	1830	42	19.10	5115	75
7.80	168	11	13.50	1872	43	19.20	5190	75
7.90	179	11	13.60	1915	44	19.30	5265	75
8.00	190	12	13.70	1959	45	19.40	5340	80
8.10	202	12	13.80	2004	46	19.50	5420	80
8.20	214	13	13.90	2050	50	19.60	5500	80
8.30	227	13	14.00	2100	55	19.70	5580	80
8.40	240	14	14.10	2155	..	19.80	5660	85
8.50	254	16	14.20	2210	..	19.90	5745	85
8.60	270	17	14.30	2265	..	20.00	5830	90
8.70	287	18	14.40	2320	..	20.10	5920	100
8.80	305	19	14.50	2375	..	20.20	6020	...
8.90	324	20	14.60	2430	..	20.30	6120	...
9.00	344	22	14.70	2485	..	20.40	6220	...
9.10	366	22	14.80	2540	..	20.50	6320	...
9.20	388	23	14.90	2595	55	20.60	6420	...
9.30	411	24	15.00	2650	55	20.70	6520	...
9.40	435	25	15.10	2705	..	20.80	6620	...
9.50	460	26	15.20	2760	..	20.90	6720	...
9.60	486	27	15.30	2815	..	21.00	6820	100
9.70	513	29	15.40	2870	..	21.10	6920	...
9.80	542	30	15.50	2925	..	21.20	7020	110
9.90	572	31	15.60	2980	..	21.30	7130	...
10.00	603	31	15.70	3035	..	21.40	7240	...
10.10	634	31	15.80	3090	..	21.50	7350	...
10.20	665	31	15.90	3145	55	21.60	7460	...
10.30	696	32	16.00	3200	58	21.70	7570	...
10.40	728	32	16.10	3258	..	21.80	7680	...
10.50	760	32	16.20	3316	..	21.90	7790	110
10.60	792	32	16.30	3374	..	22.00	7900	110
10.70	824	32	16.40	3432	..	22.10	8010	110
10.80	856	32	16.50	3490	..	22.20	8120	110
10.90	888	32	16.60	3548	..	22.30	8230	110
11.00	920	35	16.70	3606	..	22.40	8340	120
11.10	955	35	16.80	3664	..	22.50	8460	120
11.20	990	35	16.90	3722	58	22.60	8580	120
11.30	1025	35	17.00	3780	..	22.70	8700	120
11.40	1060	35	17.10	3838	..	22.80	8820	120
11.50	1095	36	17.20	3896	..	22.90	8940	120
11.60	1131	36	17.30	3954	..	23.00	9060	...

Note—The above table is not applicable for ice or obstructed channel conditions. It is based on 12 discharge measurements made during 1908, 1909 and 1910. Above gage height 22.4 feet the rating curve is a tangent, the difference being 120 per tenth.

Sangamon River.

Monthly Discharge of Sangamon River at Riverton, Ill., for 1908 to 1910.

(Drainage Area 2560 Square Miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
February 13-29	8010	3490	6260	2.45	1.55	B
March	8230	2260	5360	2.10	2.42	B
April	6920	1830	3530	1.38	1.54	B
May	13100	4310	8810	3.44	3.97	B
June	3320	344	1080	.422	.47	B
July	792	202	350	.137	.16	B
August	190	101	147	.057	.07	B
September	148	83	107	.042	.05	C
October	92	67	76.1	.030	.03	C
November	101	60	72.6	.028	.03	C
December	101	101	101	.039	.05	C
1909						
January	179	101	114	.045	.05	C
February	.....	214	2140	.837	.87	B
March	.....	920	1690	.661	.76	B
April	8580	856	3460	1.35	1.51	B
May	5040	1170	3200	1.25	1.44	B
June	5830	824	2340	.915	1.02	B
July	10600	486	4160	1.63	1.88	B
August	760	148	355	.139	.16	B
September	214	148	178	.070	.08	C
October	254	190	211	.083	.10	B
November	.....	240	723	.283	.32	C
December	1660	.....	783	.306	.35	C
The year	.....	101	1610	.630	8.54	.....
1910						
January	7020	.....	3090	1.21	1.40	B
February	3140	634	1250	.489	.51	B
March	5260	634	2110	.825	.95	B
April	948	341	641	.251	.28	B
May	6020	741	3160	1.24	1.43	B
June	3520	366	1240	.485	.54	B

Sangamon River near Oakford, Ill.

This station is located at the highway bridge about three miles northeast of Oakford, Ill., and about two and one-half miles up-stream from the C., P. & St. L. Railroad bridge. It was established Oct. 26, 1909, for the purpose of obtaining data for use in studying problems of drainage and flood control, and to obtain general statistical and comparative data.

Crane creek is tributary on the right bank about one and one-fourth miles below, and Salt creek is tributary on the right bank about six and one-fourth miles above the section. The total drainage area above the gaging station is about 5,000 square miles.

This station is on the improved portion of the river, the new channel being straight for about five miles above and one and one-half miles below the gaging section. This artificial channel was constructed 70

feet wide at the top and is now about 140 feet wide, so that material changes are liable to occur in the gaging section, tending to cause a variation in the relation of discharge to gage height. The C., P. & St. L. Railroad bridge, two and one-half miles below the section, is a wooden trestle with numerous piles in the stream bed which have a decided tendency to obstruct the flow at high water, as the trestle is at an angle to the current. Drift and ice lodge at this trestle and affect the gage heights.

The datum of the gage has remained unchanged since its installation. Because of the inaccessibility of the gage it has not been possible to obtain daily readings, but the records obtained are accurate and reliable.

The floods of February and March, 1907, and May, 1908, reached a height of about 21 feet on the present gage datum.

Sangamon River.

Discharge Measurements of Sangamon River near Oakford, Ill., for 1909 and 1910.

Date.		Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909							
October	26	H. J. Jackson	223	591	1.38	3.10	817
November	27	H. J. Jackson	255	1478	1.97	6.82	2916
1910							
March	17	M. E. McChristie	255	1303	1.73	6.03	2256
March	28	H. J. Jackson	241	913	1.65	4.71	1512
May	18	H. J. Jackson	277	1800	2.32	8.26	4180
May	21	H. J. Jackson	261	1310	2.09	6.50	2740
June	1	H. J. Jackson	324	2760	2.58	11.30	7130
June	3	H. J. Jackson	280	1910	2 25	8.57	4310

Sangamon River.

Daily Gage Height in Feet of Sangamon River near Oakford, Ill., for 1909 and 1910.

1909.

Day.	Oct.	Nov.	Dec.
1	.....	2.6	5.7
2	.....	2.6	5.45
3	.....	2.6	5.3
4	.....	.....	.....
5	.....	2.6	.....
6	.....	2.55	4.9
7	.....	.....	.....
8	.....	.....	4.6
9	.....	.....	4.25
10	.....	2.65	4.05
11	.....	.....	.....
12	.....	2.9	.....
13	.....	4.85	4.7
14	.....	.....	.....
15	.....	6.15	5.55
16	.....	6.5	6.0
17	.....	.....	.....
18	.....	8.4	6.4
19	.....	.....	.....
20	.....	9.1	8.4
21	.....	.....	.....
22	.....	8.4	8.0
23	.....	7.9	.....
24	.....	.....	7.6
25	.....	.....	.....
26	3.1	7.2	.....
27	3.1	6.8	.....
28	2.95	.....	6.6
29	2.85	6.3	.....
30	2.7	5.9	5.75
31	.....	.....	5.7

Gage heights Dec. 20, 22, 24, 28 and 30 are to top of ice.

Sangamon River.

Daily Gage Height in Feet of Sangamon River near Oakford, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	5.7	9.15	10.4	4.3	5.0	11 25
2	.....	.....	10.5	4.25	4.95	10.0
3	5.7	8.25	10.45	4.2	4.8	8.75
4	5.6	.....	10.5	4.2	5.0	8.0
5	5.5	7.95	10.6	4.3	6.65	7.4
6	.....	.....	.....	4.45	7.3	6.9
7	5.35	7.25	.....	4.9	7.1	6.6
8	5.3	.....	10.7	4.7	7.0	6.3
9	.....	.....	10.05	4.5	6.9	6.0
10	.....	6.95	9.3	4.35	7.05	6.0
11	5.3	.....	.....	4.2	7.3	6.5
12	.....	6.5	.....	4.1	7.65	6.45
13	6.4	.....	7.3	4.0	8.5	5.6
14	.....	5.7	.....	4.0	9.3	5.15
15	9.4	.....	6.65	3.95	9.35	4.85
16	.....	5.85	.....	4.0	9.2	4.6
17	10.9	.....	6.05	4.2	8.75	4.5
18	11.7	5.0	.....	4.45	8.5	4.3
19	12.6	4.5	5.7	4.7	7.65	4.1
20	13.0	.....	.....	4.8	6.95	4.0
21	.....	5.3	5.4	4.9	6.5	3.85
22	11.35	.....	.....	4.75	6.3	3.95
23	.....	4.8	.....	4.55	6.6	4.0
24	.....	4.7	5.2	4.4	7.65	3.85
25	.....	4.75	5.0	4.35	9.5	4.0
26	14.2	.....	4.9	4.35	10.4	4.05
27	13.8	.....	.....	4.35	10.8	4.8
28	.....	7.75	4.7	4.85	11.0	7.0
29	13.0	.....	4.6	5.05	11.2	7.0
30	.....	.....	4.55	4.95	11.5	7.0
31	10 0	.....	4.4	.....	11.9	.....

Gage heights Jan. 1-16 were affected by ice conditions.

Sangamon River.

Daily Discharge of Sangamon River near Oakford, Ill., for 1909 and 1910.

1909.

Day.	Oct.	Nov.	Dec.
1		670	2110
2		670	1940
3		670	1850
4		670	1770
5		670	1690
6		658	1610
7		664	1520
8		670	1440
9		676	1260
10		682	1170
11		716	1280
12		750	1390
13		1580	1500
14		2000	1750
15		2430	2000
16		2700	2320
17		3460	2470
18		4220	2620
19		4540	2500
20		4860	2400
21		4540	2300
22		4220	2200
23		3780	2100
24		3590	2000
25		3410	1900
26	810	3220	1800
27	810	2920	1650
28	765	2850	1500
29	735	2540	1400
30	695	2250	1300
31			1200
Total	3815	67276	55940

Discharge on those days when gage height is missing was obtained by interpolation. Discharge Dec. 19-31 was estimated from gage heights, climatological and other data.

Sangamon River.

Daily Discharge of Sangamon River near Oakford, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb.	Mar	Apr.	May.	June.
1	.....	4910	6200	1290	1670	7120
2	.....	4500	6300	1260	1640	5780
3	.....	4080	6250	1240	1560	4540
4	.....	3950	6300	1240	1670	3860
5	.....	3820	6410	1290	2810	3380
6	.....	3540	6450	1360	3300	3000
7	.....	3260	6480	1610	3150	2770
8	.....	3180	6520	1500	3070	2540
9	.....	3110	5830	1390	3000	2320
10	.....	3030	5060	1320	3110	2320
11	.....	2860	4470	1240	3300	2700
12	.....	2700	3890	1200	3580	2660
13	.....	2400	3300	1150	4310	2040
14	.....	2110	3060	1150	5060	1760
15	.....	2160	2810	1130	5110	1580
16	.....	2220	2580	1150	4960	1440
17	6740	1940	2360	1240	4540	1390
18	7640	1670	2240	1360	4310	1290
19	8720	1390	2110	1500	3580	1200
20	9210	1620	2010	1560	3030	1150
21	10100	1850	1910	1610	2700	1080
22	11000	1700	1870	1530	2540	1130
23	11000	1560	1830	1420	2770	1150
24	10900	1500	1790	1340	3580	1080
25	10800	1530	1670	1320	5260	1150
26	10800	2240	1610	1320	6200	1170
27	10200	2950	1560	1320	6630	1560
28	9700	3660	1500	1580	6850	3070
29	9210	.....	1440	1700	7070	3070
30	7500	.....	1420	1640	7400	3070
31	5780	.....	1340	.....	7880	.....
Total	139300	75440	108570	40960	125640	72370

Discharge on those days on which there are no gage heights was obtained by interpolation.

Sangamon River.

Rating Table for Sangamon River near Oakford, Ill., for 1909 and 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
2.00	530	5.30	1850	8.60	4400	11.90	7880
2.10	550	5.40	1910	8.70	4490	12.00	8000
2.20	570	5.50	1970	8.80	4580	12.10	8120
2.30	595	5.60	2040	8.90	4670	12.20	8240
2.40	620	5.70	2110	9.00	4760	12.30	8360
2.50	645	5.80	2180	9.10	4860	12.40	8480
2.60	670	5.90	2250	9.20	4960	12.50	8600
2.70	695	6.00	2320	9.30	5060	12.60	8720
2.80	720	6.10	2395	9.40	5160	12.70	8840
2.90	750	6.20	2470	9.50	5260	12.80	8960
3.00	780	6.30	2545	9.60	5360	12.90	9085
3.10	810	6.40	2620	9.70	5465	13.00	9210
3.20	840	6.50	2695	9.80	5570	13.10	9335
3.30	875	6.60	2770	9.90	5675	13.20	9460
3.40	910	6.70	2845	10.00	5780	13.30	9590
3.50	945	6.80	2920	10.10	5885	13.40	9720
3.60	985	6.90	2995	10.20	5990	13.50	9850
3.70	1025	7.00	3070	10.30	6095	13.60	9980
3.80	1065	7.10	3145	10.40	6200	13.70	10110
3.90	1105	7.20	3220	10.50	6305	13.80	10240
4.00	1150	7.30	3300	10.60	6410	13.90	10370
4.10	1195	7.40	3380	10.70	6520	14.00	10500
4.20	1240	7.50	3460	10.80	6630	14.10	10630
4.30	1290	7.60	3540	10.90	6740	14.20	10760
4.40	1340	7.70	3620	11.00	6850	14.30	10890
4.50	1390	7.80	3700	11.10	6960	14.40	11020
4.60	1445	7.90	3780	11.20	7070	14.50	11150
4.70	1500	8.00	3860	11.30	7180	14.60	11280
4.80	1555	8.10	3950	11.40	7290	14.70	11410
4.90	1610	8.20	4040	11.50	7400	14.80	11540
5.00	1670	8.30	4130	11.60	7520	14.90	11670
5.10	1730	8.40	4220	11.70	7640	15.00	11800
5.20	1790	8.50	4310	11.80	7760		

Note—The above table is not applicable for ice or obstructed channel conditions. It is based on 8 discharge measurements made during 1909 and 1910.

Sangamon River.

Monthly Discharge of Sangamon River near Oakford, Ill., for 1909 and 1910.

(Drainage area 5,600 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1909						
October 26-30	810	695	763	.153	.03	B
November	4860	658	2240	.448	.50	B
December	.....	.....	1800	.360	.42	C
1910						
January 17-31	11000	5780	9287	1.86	1.04	C
February	4910	1390	2690	.538	.56	B
March	6520	1340	3500	.700	.81	B
April	1700	1130	1370	.274	.31	A
May	7880	1560	4050	.810	.93	A
June	7120	1080	2410	.482	.54	A

Salt Creek near Kenney, Ill.

This station is located at the highway bridge, about three miles west of Kenney, Ill., a short distance below the Vandalia Railroad bridge. It was established Feb. 14, 1908, in order to collect data to be used in the study of drainage and flood control problems, and to obtain data for general statistical and comparative purposes.

Ten Mile creek is tributary on the right bank about four miles above the gaging station. Salt creek is a tributary of the Sangamon river. The drainage area above the section is about 459 square miles.

The datum of the gage has not been changed: the records are reliable and accurate.

The high water of 1882 is said to have been about one or one and one-half feet higher than that of the spring of 1908, or to have reached a height of about sixteen feet on the present gage.

Sangamon River.

Discharge Measurements of Salt Creek near Kenney, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
May 8	R. J. Taylor	157	1276	2.54	10.5	3239
July 28	R. J. Taylor	107	178	0.36	2.1	64
1909						
Feb. 6	R. J. Taylor	102	119	0.23	1.91	27
March 19	Wm. M. O'Neill	109	258	0.78	2.89	201
May 19	H. J. Jackson	110	254	0.85	2.92	215
November 24	H. J. Jackson	111	265	0.89	3.17	236
1910						
Mar. 9	M. E. McChristie	111	300	1.18	3.43	355
May 25	H. J. Jackson	112	344	1.27	3.96	438
May 25	H. J. Jackson	112	349	1 30	3.94	454

Sangamon River.

Daily Gage Height in Feet of Salt Creek near Kenney, Ill., for 1908 to 1910.

1908.

Day.	Jan	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	5.9	3.4	5 6	4 6	2.8	1.9	1.6	1.5	1.9	1.9
2	....	....	6.6	3.6	5.2	4.2	2 8	1.8	1.6	1.5	1.9	1.8
3	....	....	7.0	3.3	4.8	4.0	2 6	1.8	1.6	1.5	1 8	1.8
4	....	.....	7 0	3.2	8.0	4.0	2.4	1.9	1.6	1.6	1.8	1.8
5	....	.....	7.1	3.4	9.0	3.8	2.3	1 9	1.6	1.6	1.8	1.8
6	....	....	7.7	3 3	10.7	3 9	2 4	1.9	1.6	1 6	1 8	1.8
7	....	.....	7.8	3.7	10.1	3.7	2 4	1.9	1.6	1.5	1 8	1.8
8	....	..	7.1	4.2	10.7	3 6	2 3	1 8	1 6	1 6	1 8	1 8
9	....	....	6 6	4 6	11 6	3 3	2 2	1 8	1 6	1 5	1 7	1 8
10	....	....	6 0	4 8	10.5	3 2	2 1	1 9	1.5	1 5	1 8	1.8
11	....	....	5 0	4 7	9 8	3.2	2 1	1 9	1 6	1 5	1 9	1 7
12	....	....	5 2	4 4	13 0	3 0	2 1	1 9	1 6	1.5	1 7	1.7
13	....	....	4.9	4 0	15 0	2.9	2 0	2 0	1 7	1.5	1 9	1.7
14	....	8 0	4 7	3.9	12.0	2 9	2 0	2 0	1 6	1 5	1 7	1.7
15	....	9.1	4 6	4 9	12.7	3 0	2 1	1 9	1.5	1 5	1 7	1.7
16	....	10 1	4 0	5 2	10 0	2 9	3 2	1 8	1 4	1 6	1 8	1 7
17	....	9 1	3 9	4 9	8 7	2 8	2 6	1 9	1 4	1 7	1 8	1.7
18	....	6 1	3 8	4 9	8 0	2 8	2 5	1 8	1 3	1 5	1 7	1 8
19	....	4 2	4 2	4 6	8.6	2 9	2 2	1 8	1 4	1 8	1 8	1 7
20	....	3 6	4 6	4 2	8 9	2 9	2 1	1 9	1 4	1 9	1 9	1.7
21	....	4 0	4 4	4 0	8 0	2 8	2 1	1 8	1 4	1 9	1 8	1 7
22	....	4 6	4 0	3 7	8 1	2 8	2 0	1.7	1 4	1 9	1 8	1 7
23	....	4 8	4 0	3 2	7.1	2 8	3 4	1 7	1 4	1 8	1 8	1.7
24	....	5 4	3 9	5.8	6.6	2 7	2 2	1 7	1 4	1 9	1 8	1 6
25	....	7 4	3.8	7.0	5 9	2 6	2 0	1 6	1 4	1 8	1 8	1.7
26	....	8.0	3 8	7.6	5.9	2.5	2 0	1 6	1.5	1 8	1 8	1 7
27	....	8.3	3.4	7 6	5 6	2 4	3 8	1 6	1 7	1 8	1 8	1 8
28	....	7.7	3.6	7.5	5.1	2 3	3 0	1 6	1 6	1 8	1 8	1 7
29	....	6.8	3.5	6 8	5.5	2 7	2 2	1 7	1.5	1 8	1 8	1 9
30	....	.....	3.3	6.0	5 3	2 8	2 0	1 6	1 5	1 8	1 8	2 3
31	....	..	3 3	....	1 9	....	1 9	1 6	....	1 9	....	2 1

Sangamon River.

Daily Gage Height in Feet of Salt Creek near Kenney, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.9	2.1	4.8	2.5	6.0	3.1	2.2	2.0	1.45	1.45	1.5	2.4
2	1.8	2.1	4.6	2.5	5.25	2.9	2.1	1.95	1.4	1.3	1.9	2.4
3	1.8	2.1	4.2	2.5	4.7	2.9	2.05	1.9	1.7	1.35	1.85	2.3
4	1.8	2.1	4.0	2.45	4.2	2.85	1.95	1.85	1.65	1.35	1.75	2.3
5	1.8	2.0	3.8	2.4	3.9	2.8	2.5	1.85	1.5	1.4	1.75	2.3
6	1.7	2.0	3.7	2.45	3.75	3.1	2.8	1.8	1.45	1.35	1.75	2.25
7	1.7	2.1	3.5	3.1	3.5	2.9	5.75	1.75	1.5	1.35	1.75	2.3
8	1.7	2.2	3.4	3.55	3.3	2.7	6.25	1.7	1.45	1.3	1.65	1.95
9	1.7	3.0	3.7	3.3	3.9	3.8	6.0	1.7	1.4	1.3	1.4	2.1
10	1.6	3.7	3.9	3.0	4.6	4.9	5.2	1.65	1.4	1.4	1.75	2.15
11	1.6	3.2	3.9	2.8	4.7	5.0	4.3	1.6	1.4	1.3	1.65	2.15
12	1.6	3.0	3.7	2.75	4.35	4.15	6.6	1.6	1.3	1.35	2.8	2.2
13	1.7	2.7	3.6	5.1	4.0	4.3	7.25	1.5	1.3	1.3	3.0	2.5
14	1.7	4.0	3.5	5.75	3.8	5.45	5.3	1.55	1.5	1.45	2.6	2.8
15	1.7	5.5	3.3	5.15	3.65	5.4	4.8	1.55	1.3	1.4	2.35	3.1
16	1.7	4.1	3.2	4.55	3.45	3.9	4.2	1.5	1.35	1.5	4.4	3.35
17	1.7	4.9	3.1	4.15	3.25	3.75	3.75	1.5	1.4	1.3	4.85	3.4
18	1.7	4.7	2.9	3.9	3.05	3.3	3.45	1.5	1.3	1.5	4.4	3.45
19	1.7	5.0	2.9	4.9	2.9	3.05	3.2	1.5	1.3	1.6	3.8	2.85
20	1.7	5.6	2.85	5.2	2.85	2.85	3.0	1.5	1.3	1.5	3.3	2.65
21	1.7	5.7	2.8	6.25	2.75	2.7	2.8	1.4	1.3	1.7	3.15	2.55
22	2.0	6.1	2.65	7.4	2.7	2.6	2.7	1.4	1.7	1.6	3.05	2.6
23	2.1	7.5	2.6	7.7	2.6	2.65	2.6	1.4	2.5	2.4	3.15	2.5
24	2.1	8.4	2.65	5.85	2.55	2.55	2.45	1.35	2.05	1.9	3.2	2.45
25	1.8	7.4	2.85	5.4	2.55	2.7	2.3	1.4	1.8	1.75	3.0	2.4
26	1.7	6.4	2.95	4.85	4.0	3.75	2.3	3.85	1.6	1.75	2.9	2.4
27	1.8	5.5	2.95	4.65	4.35	2.75	2.3	2.1	1.5	1.7	2.7	2.35
28	1.8	5.2	2.85	4.3	4.05	2.7	2.3	1.8	1.5	1.6	2.6	2.35
29	2.0	.....	2.8	4.05	3.7	2.4	2.2	1.6	1.5	1.55	2.5	2.4
30	2.1	.....	2.65	5.55	3.4	2.3	2.15	1.55	1.45	1.5	2.45	2.4
31	2.1	.....	2.55	.....	3.2	.....	2.1	1.45	.....	1.55	.....	2.4

Gage heights Jan. 6-18, Dec. 7-31 affected by ice conditions.
Gage heights Dec. 12-31 are to top of ice.

Sangamon River.

Daily Gage Height in Feet of Salt Creek near Kenney, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	2.35	3.0	5.5	2.15	2.35	2.75
2	2.35	3.5	4.4	2.1	2.35	2.5
3	2.5	3.6	3.7	2.15	2.9	2.4
4	2.5	3.6	3.7	2.15	2.75	2.35
5	2.45	3.5	3.8	2.45	2.6	2.3
6	2.4	3.3	3.9	2.35	2.45	2.2
7	2.3	3.25	3.95	2.25	2.45	2.2
8	2.25	3.2	3.65	2.15	2.65	2.1
9	2.25	3.1	3.45	2.15	2.7	2.05
10	2.2	2.85	3.2	2.1	2.75	2.0
11	2.2	2.7	3.15	2.05	2.8	2.0
12	2.3	2.95	3.0	2.05	2.95	1.9
13	3.7	2.4	2.95	2.05	2.85	1.85
14	5.6	2.7	2.85	2.0	2.7	1.8
15	5.8	2.8	2.7	2.05	2.55	1.8
16	5.55	2.6	2.85	2.05	2.45	1.75
17	5.2	2.4	2.6	2.25	2.45	1.75
18	7.6	2.4	2.55	2.25	2.4	1.7
19	7.65	2.6	2.5	2.2	2.3	1.7
20	8.1	2.45	2.45	2.2	2.35	1.65
21	8.85	2.5	2.45	2.2	2.35	1.6
22	8.8	2.5	2.4	2.15	2.3	1.6
23	8.05	2.7	2.35	2.15	3.75	1.6
24	6.9	2.65	2.35	2.15	3.95	1.55
25	6.1	2.2	2.25	2.15	3.75	1.5
26	5.4	2.3	2.25	2.2	3.65	1.5
27	5.15	5.7	2.3	2.55	3.15	2.05
28	4.35	6.1	2.3	2.7	2.8	1.85
29	4.1	.....	2.25	2.55	3.0	1.75
30	3.85	.....	2.2	2.45	3.0	1.7
31	3.65	.....	2.15	.....	3.0	.....

Gage heights Jan. 1-31, Feb. 17-28; affected by ice conditions, discharges were not estimated.

Sangamon River.

Daily Discharge of Salt Creek near Kenney, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	1070	301	966	645	167	33	14	10	33	33
2	.....	.....	1330	352	834	524	167	25	14	10	33	25
3	.....	.....	1490	277	707	465	129	25	14	10	25	25
4	.....	.....	1490	253	1950	465	96	33	14	14	25	25
5	.....	.....	1530	301	2430	407	81	33	14	14	25	25
6	.....	.....	1810	277	3350	436	96	33	14	14	25	25
7	.....	.....	1850	379	3020	379	96	33	14	10	25	25
8	.....	.....	1530	524	3350	352	81	25	14	14	25	25
9	.....	.....	1330	645	3870	277	67	25	14	10	18	25
10	.....	.....	1100	707	3240	253	54	33	10	10	25	25
11	.....	.....	770	676	2850	252	54	33	14	10	33	18
12	.....	.....	834	584	4680	208	54	33	14	10	18	18
13	.....	.....	738	465	5840	187	43	43	18	10	33	18
14	.....	1950	676	436	4100	187	43	43	14	10	18	18
15	.....	2480	645	738	4510	208	54	33	10	10	18	18
16	.....	3020	465	834	2960	187	253	25	7	14	25	18
17	.....	2480	436	738	2290	167	129	33	7	18	25	18
18	.....	1140	407	738	1950	167	112	25	5	10	18	25
19	.....	524	524	645	2240	187	67	25	7	25	25	18
20	.....	352	645	524	2380	187	54	33	7	33	33	18
21	.....	465	584	465	1950	167	54	25	7	33	25	18
22	.....	645	465	379	2000	167	43	18	7	33	25	18
23	.....	707	465	253	1490	167	301	18	7	25	25	18
24	.....	900	436	1030	1330	148	67	18	7	33	25	14
25	.....	1670	407	1490	1070	129	43	14	7	25	25	18
26	.....	1950	407	1760	1070	112	43	14	10	25	25	18
27	.....	2090	301	1760	966	96	407	14	18	25	25	25
28	.....	1810	352	1710	802	81	208	14	14	25	25	18
29	.....	1410	326	1410	933	148	67	18	10	25	25	33
30	.....	.....	277	1100	867	167	43	14	10	25	25	81
31	.....	.....	277	.....	738	.....	33	14	.....	33	.....	54
Total	.....	23593	24967	21751	70733	7523	3206	805	336	573	755	760

Sangamon River.

Daily Discharge of Salt Creek near Kenney, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	25	54	707	112	1100	230	67	43	8	8	10	96
2	25	54	645	112	850	187	54	38	7	5	33	96
3	25	54	524	112	676	187	48	33	18	6	29	81
4	25	54	465	104	524	177	38	29	16	6	22	81
5	25	43	407	96	436	167	112	29	10	7	22	81
6	15	43	379	104	393	230	167	25	8	6	22	74
7	15	54	326	230	326	187	1020	22	10	6	22	81
8	10	67	301	339	277	148	1190	18	8	5	16	38
9	10	208	379	277	436	407	1100	18	7	5	7	54
10	5	379	436	208	646	738	834	16	7	7	22	60
11	5	253	436	167	676	770	554	14	7	5	16	60
12	5	208	379	157	569	509	1330	14	5	6	167	50
13	8	148	352	802	465	554	1600	10	5	5	208	70
14	8	465	326	1020	407	916	867	12	10	8	129	100
15	10	933	277	818	366	900	707	12	5	7	88	180
16	10	494	253	630	314	436	524	10	6	10	584	250
17	10	738	230	509	265	393	393	10	7	5	722	270
18	10	676	187	436	219	277	314	10	5	10	581	200
19	18	770	187	738	187	219	253	10	5	14	407	60
20	18	966	177	834	177	177	208	10	5	10	277	50
21	18	999	167	1190	158	148	167	7	5	18	242	40
22	43	1140	138	1670	148	129	148	7	18	14	219	30
23	54	1710	129	1810	129	138	129	7	112	96	242	35
24	54	2140	138	1050	120	120	104	6	48	33	252	20
25	25	1670	177	900	120	148	81	7	25	22	208	20
26	18	1250	198	722	465	393	81	422	14	22	187	15
27	25	933	198	660	569	158	81	54	10	18	148	15
28	25	834	177	551	480	148	81	25	10	14	129	15
29	43	.....	167	480	379	96	67	14	10	12	112	10
30	54	.....	138	950	301	81	60	12	8	10	104	10
31	54	.....	120	.....	253	.....	54	8	.....	12	.....	8
Total	695	17337	9120	17791	12430	9368	12433	952	419	412	5231	2250

Year period, 8818, discharge Jan. 6-18, Dec. 7-31 was estimated from the gage readings, climatological and other data

Sangamon River.

Daily Discharge of Salt Creek near Kenney, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	.....	208	933	60	88	158
2	.....	326	584	54	88	112
3	.....	352	379	60	187	96
4	.....	352	379	60	158	88
5	.....	326	407	104	129	81
6	.....	277	436	88	104	67
7	.....	265	450	74	104	67
8	.....	253	366	60	138	54
9	.....	230	314	60	148	48
10	.....	177	253	54	158	43
11	.....	148	242	48	167	43
12	.....	198	208	48	198	33
13	.....	96	198	48	177	29
14	.....	148	177	43	148	25
15	.....	167	148	48	120	25
16	.....	.....	177	48	104	22
17	.....	.....	129	74	104	22
18	.....	.....	120	74	96	18
19	.....	.....	112	67	81	18
20	.....	.....	104	67	88	16
21	.....	.....	104	67	88	14
22	.....	.....	96	60	81	14
23	.....	.....	88	60	393	14
24	.....	.....	88	60	450	12
25	.....	.....	74	60	393	10
26	.....	.....	74	67	366	10
27	.....	.....	81	120	242	48
28	.....	.....	81	148	167	29
29	.....	.....	74	120	208	22
30	.....	.....	67	104	208	18
31	.....	.....	60	.....	208	.....
Total	.....	3523	7003	2105	5389	1256

Sangamon River.

Rating Table for Salt Creek near Kenney, Ill., for 1908 to 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.00	..	3.70	379	6.40	1248	9.00	2430
1.10	..	3.80	407	6.50	1286	9.10	2480
1.20	..	3.90	436	6.60	1326	9.20	2530
1.30	5	4.00	465	6.70	1366	9.30	2582
1.40	7	4.10	494	6.80	1406	9.40	2634
1.50	10	4.20	524	6.90	1448	9.50	2686
1.60	14	4.30	554	7.00	1490	9.60	2740
1.70	18	4.40	584	7.10	1534	9.70	2794
1.80	25	4.50	614	7.20	1578	9.80	2848
1.90	33	4.60	645	7.30	1622	9.90	2904
2.00	43	4.70	676	7.40	1668	10.00	2960
2.10	54	4.80	707	7.50	1714	10.10	3016
2.20	67	4.90	738	7.60	1760	10.20	3072
2.30	81	5.00	770	7.70	1806	10.30	3128
2.40	96	5.10	802	7.80	1854	10.40	3184
2.50	112	5.20	834	7.90	1902	10.50	3240
2.60	129	5.30	867	8.00	1950	10.60	3296
2.70	148	5.40	900	8.10	1998	10.70	3352
2.80	167	5.50	933	8.20	2046	10.80	3408
2.90	187	5.60	966	8.30	2094	10.90	3464
3.00	208	5.70	999	8.40	2142	11.00	3520
3.10	230	5.80	1032	8.50	2190	11.10	3578
3.20	253	5.90	1066	8.60	2238	12.00	4100
3.30	277	6.00	1100	8.70	2286	13.00	4680
3.40	301	6.10	1136	8.80	2334	14.00	5260
3.50	326	6.20	1172	8.90	2382	15.00	5840
3.60	352	6.30	1210				

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 9 discharge measurements made during 1908-1910, and is fairly well defined between gage heights 1.9 feet and 10.5 feet. Above gage height 11.0 feet the rating curve is a tangent, the difference being .58 per tenth

Sangamon River.

Monthly Discharge of Salt Creek near Kenney, Ill., for 1908 to 1910.

(Drainage Area 459 Square Miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth in inches.	Accuracy.
1908						
February 14-29	3020	352	1470	3.20	1.91	B
March	1850	277	805	1.75	2.02	B
April	1760	253	725	1.58	1.76	B
May	5840	707	2280	4.97	5.73	B
June	645	81	251	.547	.61	C
July	407	33	103	.224	.26	A
August	43	14	26	.057	.07	B
September	18	5	11.2	.024	.03	C
October	33	10	18.5	.040	.05	B
November	33	18	25.2	.055	.06	B
December	81	14	24.5	.053	.06	B
1909						
January	54	.....	22.4	.049	.06	C
February	2140	43	619	1.35	1.41	B
March	707	120	294	.641	.74	B
April	1810	96	593	1.29	1.44	B
May	1100	120	401	.874	1.01	A
June	916	81	312	.680	.76	A
July	1600	38	401	.874	1.01	B
August	422	6	30.7	.067	.08	C
September	112	5	14.0	.031	.03	C
October	96	5	13.3	.029	.03	C
November	722	7	174	.379	.42	B
December	.....	.....	72.6	.158	.18	C
The year	.....	.....	246	.535	7.17	.....
1910						
February 1-15	352	96	235	.512	.29	B
March	933	60	226	.492	.57	A
April	148	43	70.2	.153	.17	A
May	450	81	174	.379	.44	A
June	158	10	41.9	.091	.10	B

South Fork of Sangamon River near Taylorville, Ill.

This station is located at the Wabash Railroad bridge, about three and one-half miles southwest of Taylorville, Ill., and about one-fourth mile up-stream from the highway bridge across the South fork known as the "Half Acre Bridge." It was established Feb. 11, 1908, for the purpose of obtaining data for use in studying drainage, flood control, and water supply problems, and also to obtain general statistical and comparative data.

Bear creek, a small tributary, enters the stream on the left bank a few miles below the station. The drainage area above the gaging station is about 427 square miles.

In August, 1909, a drainage ditch was dug along the river in this vicinity, straightening the course of the stream, but coinciding with the original channel at the gaging station. The cross-section of the stream at the gaging station was not altered, but the relation between gage height and discharge was materially changed, due to the change in slope. The gage heights to Aug. 10, 1909, inclusive, refer to the section before the change. The gage heights from Aug. 11 to Sept. 1, 1909, inclusive, are of no value, because the stream was dammed up for purpose of construction during that period. On Sept. 2, 1909, the datum of the gage was lowered two feet, and the gage heights from that date on refer to the new conditions. In all comparisons between the data for the original and the new conditions it should be noted that the gage datum has been changed. The records are accurate and reliable.

Sangamon River.

Discharge Measurements of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908						
March 25	R. J. Taylor	122	484	0.33	4.55	159
June 9	R. J. Taylor	85	345	0.25	3.3	88
1909						
February 8	R. J. Taylor	100	422	0.34	4.10	143
March 17	Wm. M. O'Neill	119	429	0.34	4.09	144
March 22	Wm. M. O'Neill	92	390	0.31	3.60	121
May 17	H. J. Jackson	122	462	0.46	4.57	214
November 29	H. J. Jackson	59	237	0.40	3.98	95
1910						
March 15	M. E. McChristie	66	275	0.56	4.91	154
March 15	M. E. McChristie	66	278	0.57	4.88	159
March 18	M. E. McChristie	64	248	0.54	4.66	133
May 12	H. J. Jackson	271	1050	0.88	9.48	923
May 14	H. J. Jackson	273	1240	0.98	9.97	1220
May 17	H. J. Jackson	128	491	0.69	7.28	339
May 19	H. J. Jackson	86	351	0.75	6.02	262
May 20	H. J. Jackson	76	320	0.63	5.62	202
May 24	H. J. Jackson	274	1260	1.00	10.14	1260

Sangamon River.

Daily Gage Height in Feet of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

1908

Day.	Jan.	Feb.	Mar.	Apr.	May.	une.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	7.0	6.9	7.0	4.8	.....	1.1	1.1	0.6	0.6	1.2
2	.....	.....	7.6	6.7	6.3	4.7	.....	1.0	0.9	0.6	0.6	1.2
3	.....	.....	8.2	7.2	6.6	4.6	.....	0.9	0.7	0.5	0.6	1.2
4	.....	.....	8.2	7.4	6.9	4.4	.....	0.9	0.7	0.5	0.6	1.3
5	.....	.....	7.8	7.0	11.2	4.0	.....	0.8	0.6	0.5	0.6	1.1
6	.....	.....	7.9	6.7	12.8	3.7	.....	0.9	0.7	0.5	0.6	1.1
7	.....	.....	8.0	6.8	12.4	3.3	.....	0.9	0.6	0.5	0.6	1.0
8	.....	.....	8.1	7.0	12.3	3.2	.....	0.8	0.6	0.5	0.6	1.0
9	.....	.....	8.5	7.0	12.1	3.3	.....	0.8	0.6	0.5	0.7	1.0
10	.....	.....	8.0	7.5	10.0	3.4	.....	0.9	0.6	0.5	0.7	1.0
11	.....	7.0	7.8	7.4	9.0	3.4	.....	0.9	0.6	0.4	0.7	1.0
12	.....	6.2	7.8	7.1	9.3	3.3	.....	0.9	0.5	0.4	0.7	1.0
13	.....	5.8	7.4	6.6	9.1	3.2	.....	0.9	0.5	0.4	0.8	1.0
14	.....	6.4	6.9	6.2	8.6	2.8	.....	0.9	0.5	0.4	0.8	0.9
15	.....	7.0	6.4	5.8	8.6	3.3	.....	0.9	0.5	0.4	0.8	0.9
16	.....	9.3	6.0	5.5	8.7	2.9	.....	0.8	0.5	0.4	0.8	0.9
17	.....	8.9	5.8	5.1	8.7	2.7	.....	0.8	0.5	0.4	0.8	1.0
18	.....	8.6	5.4	4.9	8.7	2.7	.....	0.8	0.5	0.5	0.8	1.0
19	.....	8.2	5.0	4.8	8.8	2.5	.....	0.8	0.5	0.5	0.8	1.0
20	.....	7.7	5.3	4.8	8.8	2.4	.....	0.7	0.4	0.5	0.8	1.0
21	.....	7.3	5.1	4.6	8.8	2.5	.....	0.7	0.4	0.6	0.8	0.9
22	.....	6.9	4.9	4.3	8.8	2.3	.....	0.6	0.4	0.6	0.9	0.9
23	.....	6.7	4.7	4.1	8.9	2.2	.....	0.6	0.5	0.7	1.1	0.9
24	.....	6.7	4.6	6.9	8.9	2.0	.....	0.6	0.6	0.7	1.2	0.9
25	.....	7.6	4.5	7.7	8.1	1.9	.....	0.5	0.6	0.8	1.3	0.9
26	.....	9.9	4.5	8.0	7.7	1.8	.....	0.5	0.6	0.9	1.1	0.9
27	.....	10.3	4.1	8.3	6.9	1.8	.....	0.5	0.7	0.9	1.1	0.8
28	.....	9.5	4.2	8.2	6.8	1.6	.....	0.4	0.7	0.8	0.9	0.8
29	.....	8.6	4.6	8.0	6.7	1.9	1.4	2.4	0.6	0.7	0.9	1.4
30	.....	.....	4.6	7.6	5.8	1.8	1.3	1.6	0.6	0.6	1.4	1.4
31	.....	.....	4.5	.....	4.8	.....	1.1	1.3	.....	0.6	.....	1.3

Note—Chain stolen from July 1 to 28, inclusive.

Sangamon River.

Daily Gage Height in Feet of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1 3	1.5	6.5	3.25	4.45	6.45	6.15	3.0	.....	1.65	2.4	3.75
2	1.3	1.7	5.9	3.15	4.9	6.6	5.0	2.8	1.65	1.65	2.35	3.6
3	1.3	1 9	5.6	3.3	4.75	6.6	3.9	2.7	1.65	1.6	2.2	3.55
4	1.3	2.3	5.0	3.2	4.5	6.6	2.7	2.55	1.65	1.6	2.3	3.45
5	1.3	2.5	4.9	3.05	4.15	6.4	6 5	2.5	1.7	1.6	2.2	3.65
6	1.3	3.4	4.7	3.25	4.0	6.1	8.2	2.4	1.6	1.6	2.2	3.6
7	1.3	4.1	4.4	4.8	3.85	5.85	9.1	2.3	1.8	1.6	2.8	3.6
8	1.1	4 2	4.1	5.65	4.7	5.55	10.1	2.0	1.75	1.6	3.3	3.6
9	1.0	4.5	4 2	5.55	7.2	4.85	9.9	2.0	1.7	1.55	3.95	3.55
10	0.9	4.2	4.6	4.85	7.85	5.2	9.3	1.9	1.7	1.55	3.7	3.5
11	0 8	3.9	4.9	4.75	8.7	5.75	9.3	.....	1.65	1.55	3.45	3.5
12	0.8	3.7	5.6	6.6	8.25	5.6	9.2	.....	1.65	1.6	3.35	3.95
13	0.7	3.4	5.2	6.9	7.7	5.65	9.05	.....	1.65	1.55	4.5	4.65
14	0.7	5.4	4.8	8.6	6.9	5.15	8.8	.....	1.65	1.5	6.2	6.75
15	0.7	6.2	4.5	8.55	6.2	4.6	8.45	.....	2.0	.....	6.3	7.2
16	0.8	6.4	4.1	8 55	5.1	4 25	8 15	.....	1 8	.....	6.5	6.75
17	0.8	5.8	3.95	8.0	4 6	4.15	7.7	.....	1.75	.....	7.35	6.15
18	0 9	6 3	3 85	7 15	4.15	3.9	6.05	.....	1.7	.....	7.2	5.75
19	0.9	6.5	3.75	6.95	3.9	3.55	5 5	.....	1.7	.....	6.85	5.3
20	1.0	7.0	3.65	6 75	3.85	3.4	4.5	.....	1.65	3.65	6.0	5.15
21	1.4	7.95	3.55	8 25	3.75	3.0	4.35	.....	1.65	3.2	5.45	4.95
22	2 05	8 4	3.55	9.4	3.55	3.2	4.0	.....	1.65	3.1	5.4	4.85
23	3 0	8.6	3.7	10 0	3.1	2.9	3.85	.....	2.5	5.05	5.15	4.55
24	3 4	8.6	3 65	9 55	3.4	2.15	3.7	.....	2.65	4.2	4.85	4.45
25	3.5	8.6	3 6	8 25	5 1	2.45	3 65	.....	2.1	4.0	4.5	4.3
26	3 2	8 5	3 55	7 7	5.9	2.8	3.6	.....	1.75	3.95	4.3	4.0
27	1 6	8 0	3 75	6.65	6.9	3 2	3 55	.....	1.75	3.65	4 2	3.95
28	1 9	7 5	3.55	6 25	7.25	4.75	3.5	.....	1.7	3 15	4 1	3.95
29	2 0	.....	3 4	5 9	7.1	6.0	3.45	.....	1 7	3 0	3 95	3.95
30	2 4	.....	3 35	5 25	6 45	6.55	3.4	.....	1.65	2 85	3.9	3 95
31	1.9	.....	3 3	.....	6 5	.....	3 35	.....	.....	2.4	.....	3.95

Gage heights were affected by ice conditions from Jan. 3 to Feb. 13, and from Dec. 8 to 31. Gage heights Dec. 17 to 31 are to top of ice.

Sangamon River.

Daily Gage Height in Feet of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	4.25	4.5	10.95	3.8	3.05	7.05
2	4.55	4.55	10.7	3.65	4.7	5.9
3	4.75	4.95	10.25	3.4	7.85	5.7
4	4.85	5.4	9.95	3.2	8.7	5.85
5	4.95	5.5	9.6	3.9	8.8	6.0
6	5.4	5.4	9.15	3.65	8.15	5.65
7	5.9	5.2	9.0	3.3	7.95	5.2
8	6.0	4.95	8.1	3.1	8.0	4.8
9	6.2	4.7	7.75	3.05	8.4	4.9
10	6.35	4.45	7.1	3.15	8.25	4.45
11	6.85	4.2	6.8	3.3	9.15	4.0
12	7.05	3.85	6.05	3.35	9.6	3.95
13	8.0	3.8	5.5	3.9	10.2	3.8
14	8.8	3.75	5.1	4.0	9.95	3.9
15	9.7	3.65	4.95	4.1	9.05	3.8
16	10.0	3.55	4.8	4.85	8.45	3.7
17	10.1	3.7	4.75	5.95	7.4	3.7
18	10.45	3.7	4.7	6.75	6.75	3.2
19	10.7	3.9	4.55	7.05	5.85	3.2
20	11.0	3.95	4.6	6.6	5.4	3.2
21	10.85	4.2	4.7	5.9	6.85	3.1
22	10.25	4.25	4.65	4.95	8.4	3.1
23	9.35	3.9	4.5	3.9	10.25	3.1
24	8.65	3.8	4.45	3.65	9.9	3.05
25	7.3	3.85	4.3	3.5	11.0	3.1
26	6.75	4.2	4.2	3.15	10.85	3.2
27	6.35	8.9	4.05	3.0	10.3	3.5
28	6.0	10.0	4.0	3.4	9.45	3.45
29	5.45	.....	3.9	3.5	8.65	3.15
30	5.05	.....	3.9	3.2	8.0	3.0
31	4.95	.....	3.85	.....	7.6	.....

Gage reader made no notes with reference to ice conditions during January and February.

Sangamon River.

Daily Discharge of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	800	762	800	238	.....	8	8	6	6	9
2	.....	.....	1030	690	554	223	.....	7	7	6	6	9
3	.....	.....	1270	876	654	209	.....	7	6	5	6	9
4	.....	.....	1270	952	762	183	.....	7	6	5	6	10
5	.....	.....	1110	800	2560	150	.....	6	6	5	6	8
6	.....	.....	1150	690	3300	118	.....	7	6	5	6	8
7	.....	.....	1190	726	3110	86	.....	7	6	5	6	7
8	.....	.....	1230	800	3060	79	.....	6	6	5	6	7
9	.....	.....	1390	800	2970	86	.....	6	6	5	6	7
10	.....	.....	1190	990	2020	93	.....	7	6	5	6	7
11	.....	800	1110	952	1600	93	.....	7	6	5	6	7
12	.....	524	1110	838	1730	86	.....	7	5	5	6	7
13	.....	424	952	654	1640	79	.....	7	5	5	6	7
14	.....	586	762	524	1430	55	.....	7	5	5	6	7
15	.....	800	586	424	1440	86	.....	7	5	5	6	7
16	.....	1730	470	361	1460	60	.....	6	5	5	6	7
17	.....	1560	424	286	1470	50	.....	6	5	5	6	7
18	.....	1420	341	253	1480	50	.....	6	5	5	6	7
19	.....	1270	269	238	1500	41	.....	6	5	5	6	7
20	.....	1070	322	238	1510	37	.....	6	5	5	6	7
21	.....	914	286	209	1520	41	.....	6	5	6	6	7
22	.....	762	253	171	1530	33	.....	6	5	6	7	7
23	.....	690	223	150	1550	30	.....	6	5	6	8	7
24	.....	690	209	762	1560	24	.....	6	6	6	9	7
25	.....	1030	196	1070	1230	22	.....	5	6	6	10	7
26	.....	1980	196	1190	1070	20	.....	5	6	7	8	7
27	.....	2160	150	1310	762	20	.....	5	6	7	8	6
28	.....	1810	160	1270	726	16	.....	5	6	6	7	6
29	.....	1430	209	1190	690	22	12	37	6	6	7	12
30	.....	.....	209	1030	464	20	10	16	6	6	12	12
31	.....	.....	196	.....	238	.....	8	10	.....	6	.....	10
Total.	.....	21650	20263	21206	46390	2350	562	240	171	170	202	239

July 1 to 28 estimate equivalent to 19 sec. ft. per day.

Sangamon River.

Daily Discharge of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	10	10	620	82	190	603	510	66	8	8	27	84
2.....	10	15	447	76	253	654	269	55	8	8	26	77
3.....	10	22	381	86	230	654	132	50	8	7	21	74
4.....	10	33	269	79	196	654	50	43	8	7	24	69
5.....	8	41	253	69	155	586	620	41	9	7	21	79
6.....	8	93	223	82	140	496	1270	37	7	7	21	77
7.....	8	150	183	238	128	436	1640	33	11	7	42	77
8.....	6	160	150	392	223	371	2060	24	10	7	62	70
9.....	5	196	160	371	876	246	1980	24	9	6	94	60
10.....	5	160	209	246	1130	304	1730	22	9	6	82	50
11.....	4	132	253	230	1470	413	1730	.....	8	6	68	60
12.....	4	116	381	654	1290	381	1680	.....	8	7	64	94
13.....	4	93	304	762	1070	392	1620	.....	8	6	127	136
14.....	4	341	238	1430	762	295	1520	.....	8	5	265	333
15.....	4	524	196	1410	524	209	1370	.....	15	8	276	403
16.....	5	586	150	1410	286	166	1250	.....	11	12	299	333
17.....	5	424	136	1190	209	155	1070	.....	10	20	430	240
18.....	7	554	128	857	155	132	483	.....	9	30	403	200
19.....	7	620	120	781	132	104	361	.....	9	40	348	170
20.....	7	800	112	708	128	93	196	.....	8	80	245	150
21.....	12	1170	104	1290	120	66	177	.....	8	58	197	130
22.....	26	1350	104	1770	104	79	140	.....	8	54	193	110
23.....	66	1430	116	2020	93	69	128	.....	30	165	173	90
24.....	93	1430	112	1830	93	28	116	.....	36	109	150	80
25.....	100	1430	108	1290	286	39	112	.....	18	97	127	75
26.....	79	1390	104	1070	447	55	108	.....	10	94	115	70
27.....	16	1190	120	672	762	79	104	.....	10	80	109	70
28.....	22	990	104	539	895	230	100	.....	9	56	103	65
29.....	24	.....	93	447	838	470	96	.....	9	50	94	65
30.....	20	.....	90	313	603	637	93	.....	8	44	92	60
31.....	15	.....	86	.....	620	.....	89	.....	.....	27	.....	60
Total.	604	15450	5950	22394	14408	9087	22804	815	327	1118	4298	3711

Aug. 11-31 estimated equivalent to 20 sec. ft. per day.

Year period, 100966; discharge January 5-17, Jan. 30-Feb. 2, Aug. 11-Sept. 1, Oct. 15-19, Dec. 8-11, and Dec. 17-31 was estimated from the daily gage heights when available and from climatological and other data.

Sangamon River.

Daily Discharge of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	112	127	1580	87	52	378
2	130	130	1470	80	140	236
3	144	158	1300	67	534	218
4	150	193	1180	58	764	232
5	158	201	1050	92	793	245
6	193	193	903	80	609	214
7	236	177	855	62	558	177
8	245	158	596	54	570	147
9	265	140	512	52	678	154
10	282	124	386	56	636	124
11	348	109	340	62	903	97
12	378	90	250	64	1050	94
13	570	87	201	92	1280	87
14	793	84	169	97	1180	92
15	1090	80	158	103	871	87
16	1200	74	147	150	692	82
17	1240	82	144	240	439	82
18	1370	82	140	333	333	58
19	1470	92	130	378	232	58
20	1600	94	133	312	193	58
21	1510	109	140	236	348	54
22	1300	112	136	158	678	54
23	968	92	127	92	1300	54
24	750	87	121	80	1160	52
25	421	90	115	72	1600	54
26	333	109	109	56	1540	28
27	282	821	100	50	1310	72
28	245	1200	97	67	1000	70
29	197	.....	92	72	750	56
30	165	.....	92	58	570	50
31	158	.....	90	.....	479	.....
Total	18333	5098	12866	3460	23242	3494

Open water rating was used for these months; discharge may be too large.

Sangamon River.

Rating Table for South Fork of Sangamon River near Taylorville, Ill., for 1908 and 1909.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
0.00	..	3.30	86	6.60	654	9.90	1978
.10	..	3.40	93	6.70	690	10.00	2020
.20	..	3.50	100	6.80	726	10.10	2065
.30	..	3.60	108	6.90	762	10.20	2110
.40	5	3.70	116	7.00	800	10.30	2155
.50	5	3.80	124	7.10	838	10.40	2200
.60	6	3.90	132	7.20	876	10.50	2245
.70	6	4.00	140	7.30	914	10.60	2290
.80	6	4.10	150	7.40	952	10.70	2335
.90	7	4.20	160	7.50	990	10.80	2380
1.00	7	4.30	171	7.60	1030	10.90	2425
1.10	8	4.40	183	7.70	1070	11.00	2470
1.20	9	4.50	196	7.80	1110	11.10	2515
1.30	10	4.60	209	7.90	1150	11.20	2560
1.40	12	4.70	223	8.00	1190	11.30	2605
1.50	14	4.80	238	8.10	1230	11.40	2650
1.60	16	4.90	253	8.20	1270	11.50	2695
1.70	18	5.00	269	8.30	1310	11.60	2740
1.80	20	5.10	286	8.40	1350	11.70	2785
1.90	22	5.20	304	8.50	1390	11.80	2830
2.00	24	5.30	322	8.60	1432	11.90	2875
2.10	27	5.40	211	8.70	1474	12.00	2920
2.20	30	5.50	361	8.80	1516	12.10	2967
2.30	33	5.60	381	8.90	1558	12.20	3014
2.40	37	5.70	402	9.00	1600	12.30	3061
2.50	41	5.80	424	9.10	1642	12.40	3108
2.60	45	5.90	447	9.20	1684	12.50	3155
2.70	50	6.00	470	9.30	1726	12.60	3202
2.80	55	6.10	496	9.40	1768	12.70	3249
2.90	60	6.20	521	9.50	1810	12.80	3296
3.00	66	6.30	554	9.60	1852	12.90	3343
3.10	72	6.40	586	9.70	1894	13.00	3390
3.20	79	6.50	620	9.80	1936		

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on six discharge measurements made during 1908 and 1909 and the discharge curve from Sept. 2, 1909, to June 30, 1910. Below one foot the table is approximate.

Sangamon River.

Rating Table for South Fork of Sangamon River near Taylorville, Ill., for 1909 and 1910.

Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.	Gage height—Feet.	Discharge—Sec. ft.
1.00	..	3.80	87	6.60	312	9.40	985
1.10	..	3.90	92	6.70	326	9.50	1019
1.20	..	4.00	97	6.80	340	9.60	1054
1.30	..	4.10	103	6.90	355	9.70	1089
1.40	..	4.20	109	7.00	370	9.80	1126
1.50	5	4.30	115	7.10	386	9.90	1163
1.60	7	4.40	121	7.20	403	10.00	1200
1.70	9	4.50	127	7.30	421	10.10	1238
1.80	10	4.60	133	7.40	439	10.20	1276
1.90	13	4.70	140	7.50	459	10.30	1314
2.00	15	4.80	147	7.60	479	10.40	1354
2.10	18	4.90	154	7.70	501	10.50	1394
2.20	21	5.00	161	7.80	523	10.60	1434
2.30	24	5.10	169	7.90	546	10.70	1474
2.40	27	5.20	177	8.00	570	10.80	1516
2.50	30	5.30	185	8.10	596	10.90	1558
2.60	34	5.40	193	8.20	622	11.00	1600
2.70	38	5.50	201	8.30	650	11.10	1642
2.80	42	5.60	209	8.40	678	11.20	1684
2.90	46	5.70	218	8.50	706	11.30	1726
3.00	50	5.80	227	8.60	735	11.40	1768
3.10	54	5.90	236	8.70	764	11.50	1810
3.20	58	6.00	245	8.80	793	11.60	1852
3.30	62	6.10	255	8.90	824	11.70	1894
3.40	67	6.20	265	9.00	855	11.80	1936
3.50	72	6.30	276	9.10	887	11.90	1978
3.60	77	6.40	287	9.20	919	12.00	2020
3.70	82	6.50	299	9.30	951		

Note.—The above table is not applicable for ice or obstructed channel conditions. It is based on 10 discharge measurements made during 1909-1910.

Sangamon River.

Monthly Discharge of South Fork of Sangamon River near Taylorville, Ill., for 1908 to 1910.

(Drainage area 427 square miles.)

Month.	Discharge in Second-feet.			Run-off.		
	Maximum.	Minimum.	Mean.	Second-feet per square mile.	Depth i inches.	Accuracy.
1908						
January						
February 11-29	2160	424	1140	2.67	1.89	B
March	1390	150	654	1.53	1.76	B
April	1310	150	707	1.66	1.85	B
May	3300	238	1500	3.51	4.05	C
June	238	16	78.3	.183	.20	B
July		8	18.1	.042	.05	D
August	37	5	7.7	.018	.02	C
September	8	5	5.7	.013	.01	C
October	7	5	5.5	.013	.01	C
November	12	6	6.7	.016	.02	C
December	12	6	7.7	.018	.02	C
1909						
January	100		19.5	.046	.05	C
February	1430		552	1.29	1.34	B
March	620	86	192	.450	.52	A
April	2020	69	746	1.75	1.95	B
May	1470	93	465	1.09	1.26	B
June	654	28	303	.710	.79	A
July	2060	50	736	1.72	1.98	B
August			26.3	.062	.07	D
September	36	7	10.9	.026	.03	C
October	165	5	36.1	.085	.10	C
November	430	21	143	.335	.37	B
December			120	.281	.32	D
The year			279	.654	8.78	
1910						
January	1600	112	591	1.38	1.59	C
February	1200	74	182	.426	.44	A
March	1580	90	415	.972	1.12	A
May	1600	52	750	1.76	2.03	A
June	378	50	116	.272	.30	B

CAHOKIA CREEK.

Description.

The drainage area of Cahokia creek lies in the southwestern part of the State of Illinois. The creek rises in the southern part of, and about on line between Montgomery and Macoupin counties, flows in a southwesterly direction diagonally across the southeast corner of Macoupin county and the northwest portion of Madison county, past Edwardsville, through East St. Louis, Ill., and empties into the Mississippi river. The creek is very crooked and its length is approximately fifty-five miles. The total drainage area is 375 square miles. Its principal tributary is Indian creek, which enters from the right bank about three-fourths of a mile north of the Wabash Railroad bridge near Poag, Ill.

The drainage basin is long and narrow, being about forty-five miles in length; the average width is about eight miles; and maximum width is about twelve miles. The ground is low, level, or undulating, with a chain of bluffs crossing the drainage area just north of Poag, Ill. The sources of the creek are about 680 feet, and the mouth about 385 feet above sea level.

There are no forested areas in this drainage basin. The mean annual rainfall is about forty inches. In general, the winter conditions are mild. The opportunities for storage and water power development have not been investigated, but are undoubtedly not worthy of consideration. Flood control, especially in its relation to the proposed flood protection works of the East Side Levee and Sanitary District of East St. Louis, Ill., is the most important problem under consideration at present in connection with this drainage basin.

One gaging station has been maintained in this drainage basin:

Cahokia creek near Poag, Ill., 1909, 1910.

Cahokia Creek near Poag, Ill.

This station is located at the Wabash Railroad bridge, about three-fourths of a mile northeast of the Wabash Railroad station at Poag, Ill. It was established Dec. 13, 1909, to obtain data for use in studying drainage and flood control problems. The data collected will be used by the East Side Levee and Sanitary District of East St. Louis, Ill., in its study of flood control and prevention at that place.

Indian creek is tributary from the right bank about three-fourths of a mile above the section. The total drainage area above the gaging station is 259 square miles, as determined by the East Side Levee and Sanitary District.

The datum of the gage has remained unchanged since its installation; the records are accurate and reliable. The data at present are insufficient for a determination of the daily flow.

Cahokia Creek.

Discharge Measurements of Cahokia Creek near Poag, Ill.

1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1910						
March 21	H. J. Jackson	48	108	0.47	3.43	50
March 24	H. J. Jackson	47	101	0.46	3.33	46
April 13	H. J. Jackson	47	96	0.46	3.10	44
May 3	W. H. Morgan	(a) 89	716	1.54	12.45	1100
May 24	W. H. Morgan	(b)115	847	1.56	13.53	1320

(a) and (b) East Side Levee and Sanitary District.

Cahokia Creek.

Daily Gage Height in Feet of Cahokia Creek near Poag, Ill., for 1909 and 1910.

1909.

Day.	Dec.
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	12.0
14	11.0
15	8.5
16	7.0
17	6.2
18	5.0
19	3.6
20	3.0
21	2.8
22	2.3
23	2.1
24	2.0
25	1.9
26	1.9
27	1.9
28	1.8
29	1.8
30	1.7
31	2.0

Gage heights Dec. 18-31 were affected by ice conditions.

Cahokia Creek.

Daily Gage Height in Feet of Cahokia Creek near Poag, Ill., for 1909 and 1910.

1910.

Day.	Jan.	Feb	Mar.	Apr.	May.	June.
1	2.5	2.3	16.6	2.9	3.3	4.2
2	3.2	2.3	14.5	2.8	8.8	3.5
3	3.6	4.0	12.3	3.1	12.8	3.4
4	4.0	5.0	9.0	3.2	10.3	12.1
5	5.0	4.2	6.6	6.4	6.1	13.2
6	6.0	3.8	5.0	5.8	5.0	9.5
7	5.2	3.3	4.3	4.2	6.5	5.6
8	4.2	3.1	4.2	3.6	7.7	4.0
9	3.5	3.0	3.9	3.3	6.1	6.7
10	3.2	2.8	3.6	3.2	5.0	5.0
11	3.0	2.6	3.4	3.0	7.9	4.4
12	8.0	2.4	3.2	3.1	8.5	4.0
13	16.0	2.3	3.1	3.1	7.1	3.6
14	6.4	2.2	.0	2.9	5.6	4.1
15	16.1	5.0	3.0	3.5	4.2	5.4
16	15.0	4.0	2.9	7.5	4.0	6.3
17	12.0	3.5	2.9	11.1	4.0	4.2
18	13.5	3.4	2.8	6.6	4.2	3.7
19	13.7	3.3	2.8	5.5	3.8	3.4
20	11.4	3.2	2.7	4.5	3.5	3.2
21	6.0	3.0	3.4	4.1	3.2	3.0
22	4.0	2.9	3.3	3.9	3.0	2.8
23	3.1	2.8	3.3	3.7	13.5	2.6
24	3.0	2.7	3.3	3.5	13.3	2.4
25	3.0	2.6	3.2	3.4	11.5	3.5
26	2.9	4.0	3.2	3.5	8.2	3.0
27	2.8	11.8	3.2	4.5	5.0	4.0
28	2.7	12.9	3.1	4.1	4.5	4.2
29	2.6	.....	3.1	3.7	4.0	3.2
30	2.5	.....	3.1	3.4	7.4	2.8
31	2.4	.....	3.0	.....	4.5	.....

LITTLE WABASH RIVER.

Description.

The drainage basin of the Little Wabash river lies in the southeastern part of the State of Illinois. The river rises in the southwestern corner of Coles county, flows slightly southeastward and empties into the Wabash river, about fifteen miles above its mouth, at the boundary line between White and Gallatin counties. The Skillet fork is the only tributary of any size, joining it not far from its mouth. The Little Wabash is about 150 miles in length. The total drainage area is 3,200 square miles.

The basin is shaped something like a parallelogram with the long sides north and south. The country is level or undulating. The soil is a rich black loam in the northern part; in the southern part it gradually changes into a yellow clay or "mulatto soil." The elevation of the sources of the river is about 720 feet; at its mouth it is about 340 feet above sea level. There are no forested areas in this basin. The annual rainfall is about forty-two inches. The winter conditions are mild; ice does not form very thick, snowfall is light and does not last long.

Storage possibilities have not been investigated, although the growing demand for water and for flood control makes storage a subject of considerable importance.

There are no opportunities for water power development anywhere in this basin.

Drainage and flood control are subjects of considerable interest along this river. The United States Department of Agriculture is making a study of conditions with a view of developing a plan for reclaiming and protecting areas that are overflowed during floods. Portions of the river have already been mapped for use in this study.

The following gaging stations are being maintained in this basin:

Little Wabash river near Clay City, 1908, 1909, 1910.

Little Wabash river near Golden Gate, 1908, 1909, 1910.

Little Wabash at Carmi, 1908, 1909, 1910.

Skillet fork near Wayne City, 1908, 1909, 1910.

Skillet fork near Mill Shoals, 1908, 1909, 1910.

Little Wabash River near Clay City, Ill.

This station is located at the B. & O. S. W. Railroad bridge, about two miles east of Clay City, Ill. It was established Oct. 3, 1908, for the purpose of obtaining data for use in studying problems of drainage and flood control.

Big Muddy creek is tributary from the left bank about five miles below the section. The total drainage area above the gaging station is about 808 square miles.

This station is at the toe of a horseshoe bend in the river and the ground inside the bend along the railroad track is low. During high water the Little Wabash river overflows into Little Muddy creek, a branch of Big Muddy creek, and in extreme high water also overflows into Big Muddy creek, forming at such times a sheet of water about four miles in width along the railroad embankment. The discharge of the Little Wabash at the gaging station during extreme high water can not be determined on account of the above conditions, for the flow which passes the gaging station includes some of the flood waters of Big Muddy creek.

The datum of the gage has remained unchanged since its installation, and the records are reliable and accurate.

Springs feed the river near the gaging station and the river has not been known to go dry at this point. The flood of Feb. 8, 1909, reached a height of 23.7 feet on the gage. This station is maintained principally to determine the height of high water and the duration of floods. On account of insufficient data and poor conditions at the section, the daily discharge could not be determined.

Little Wabash River.

Discharge Measurements of Little Wabash River near Clay City, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909						
May 7	H. J. Jackson	59	266	0.59	7.62	157
November 6	H. J. Jackson	50	182	0.10	6.10	18
1910						
March 4	H. J. Jackson	1703	6967	1.40	*18.73	9756
March 11	H. J. Jackson	64	342	0.93	8.92	317
March 11	H. J. Jackson	64	341	0.88	8.89	302

* N. G. includes flow of Little Muddy and Big Muddy Creeks.

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River near Clay City, Ill., for 1908 to 1910.

1908.

Day.	Oct.	Nov.	Dec.
1	.....	5.8	6.3
2	.....	5.8	6.3
3	.....	5.8	7.8
4	.....	5.8	7.3
5	.....	5.8	7.3
6	.....	5.8	*6.8
7	.....	5.8	6.3
8	.....	5.8	6.3
9	.....	5.8	6.1
10	.....	5.8	6.1
11	.....	5.8	6.1
12	5.9	5.8	6.1
13	5.9	5.8	*6.0
14	5.9	5.8	6.0
15	5.9	5.8	6.0
16	5.9	5.8	6.0
17	5.9	5.8	6.0
18	5.9	5.8	6.0
19	5.9	5.8	6.0
20	5.9	5.8	6.0
21	5.9	5.8	6.0
22	5.9	5.8	5.9
23	5.9	5.8	5.9
24	5.9	5.8	5.9
25	5.9	6.0	5.9
26	5.9	6.0	5.9
27	5.9	6.0	5.9
28	5.9	6.0	5.9
29	5.9	*6.2	5.9
30	5.8	6.3	5.9
31	5.9	.....	5.9

* Interpolated.

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River near Clay City, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.9	11.9	11.2	7.7	9.5	8.6	8.7	.....	6.0	6.0	6.2	7.1
2	5.9	9.5	10.9	7.7	*8.9	10.2	7.9	.....	6.0	6.0	6.2	7.0
3	5.9	8.0	8.8	7.6	8.3	9.2	7.3	8.4	6.0	*6.0	6.1	6.9
4	5.9	7.0	8.2	*7.6	8.1	9.2	*7.1	7.3	6.0	6.0	6.1	6.8
5	5.9	7.0	8.2	7.5	7.8	12.5	*6.8	7.0	*6.0	6.0	6.1	6.7
6	5.9	6.9	7.9	7.2	7.7	*11.6	6.6	6.8	6.0	6.0	6.0	6.65
7	5.9	21.3	*7.9	8.3	7.6	10.6	10.2	6.6	6.0	5.9	6.25	6.95
8	5.9	23.7	7.9	12.7	7.4	9.4	14.7	*6.4	6.0	5.9	6.7	7.1
9	5.9	22.9	18.3	17.4	*8.2	8.6	16.8	6.3	6.0	5.9	6.6	7.1
10	*5.9	9.2	18.7	18.0	9.1	8.5	17.2	6.3	.....	*5.8	6.3	7.1
11	5.9	9.2	18.8	*18.0	15.4	8.3	*17.6	6.3	.....	5.8	6.2	7.4
12	6.0	11.3	18.8	17.9	15.1	10.9	18.0	6.3	.....	5.8	6.8	12.4
13	6.0	8.6	18.6	12.5	11.9	*10.8	17.8	6.3	.....	5.8	7.5	17.05
14	6.0	*10.8	*17.2	18.1	10.0	10.6	17.6	6.3	6.4	5.8	7.4	18.1
15	6.0	13.0	15.9	18.6	12.6	12.6	17.8	*6.2	6.2	5.8	7.3	18.15
16	6.0	16.7	11.5	18.9	*11.3	10.8	18.1	6.2	6.0	5.8	7.4	18.4
17	*6.0	17.0	9.1	18.6	10.0	8.4	18.1	6.2	6.0	*6.1	9.4	17.8
18	6.0	17.0	8.9	*16.1	8.9	8.5	*18.0	6.2	6.0	6.4	10.7	13.4
19	6.0	13.7	8.1	13.6	8.3	9.5	18.0	6.2	*6.0	6.6	10.5	11.0
20	6.0	16.4	8.1	13.8	8.0	*8.4	17.8	6.2	6.0	*8.0	9.05	9.8
21	6.0	*17.2	*8.0	14.5	7.6	7.4	15.0	6.2	6.0	9.3	9.0	8.4
22	6.0	18.0	7.9	16.3	7.3	7.4	10.3	*6.2	6.2	8.6	7.7	8.4
23	6.0	18.5	7.6	17.3	*7.2	7.5	8.3	6.2	7.6	7.6	10.7	7.9
24	*6.7	18.5	7.6	17.4	7.1	7.5	7.8	6.2	9.1	*7.6	14.0	7.4
25	7.4	18.4	7.6	*15.4	7.0	7.8	*7.6	6.0	8.2	7.7	15.0	7.4
26	7.4	18.2	8.9	13.3	7.0	9.5	7.4	6.0	*7.6	7.8	11.9	7.25
27	7.4	18.2	9.2	9.9	7.6	*9.8	7.2	6.0	7.0	7.7	9.6	7.1
28	7.0	*18.0	*8.8	8.9	12.3	10.1	7.1	6.0	6.8	7.0	8.1	7.1
29	6.9	.....	8.3	10.1	10.8	9.3	7.1	*6.0	6.2	6.8	7.6	7.0
30	6.9	.....	7.9	12.0	*10.1	8.3	7.1	6.0	6.1	6.4	7.25	6.9
31	*9.4	.....	7.8	.....	*9.4	.....	.....	6.0	.....	*6.3	.....	6.9

* Interpolated.
Gage heights Dec. 22-31 to top of ice.

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River near Clay City, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	6.9	8.4	18.75	6.7	7.9	10.4
2	7.0	8.9	19.5	6.7	7.4	8.7
3	7.1	8.9	19.0	6.7	7.1	8.0
4	7.1	9.45	18.7	6.7	7.1	7.7
5	8.4	11.2	18.5	6.9	10.55	7.8
6	8.9	10.2	18.3	7.0	10.8	10.2
7	9.3	9.0	17.0	7.0	9.0	10.1
8	9.3	8.4	13.35	7.0	9.4	8.4
9	9.3	7.85	11.3	7.0	11.6	7.9
10	7.9	7.4	9.3	7.0	12.5	7.4
11	7.3	7.55	8.95	6.8	11.5	7.3
12	7.3	7.45	8.5	6.6	9.7	7.3
13	10.05	7.3	8.3	6.55	13.5	7.2
14	15.9	7.3	8.0	6.55	15.4	7.0
15	18.0	7.9	7.9	6.55	12.5	6.8
16	18.2	9.4	7.7	7.0	9.7	6.7
17	18.2	9.4	7.5	8.6	8.6	6.6
18	17.9	9.4	7.4	9.6	8.15	6.5
19	17.55	9.2	7.3	9.9	7.9	6.5
20	17.8	9.2	7.2	9.3	7.8	7.4
21	18.0	9.2	7.1	8.4	7.6	6.6
22	17.45	10.2	7.1	8.0	7.6	6.4
23	11.0	12.7	7.1	7.7	7.5	6.4
24	10.4	13.3	7.3	7.4	12.3	6.4
25	9.5	12.5	7.3	7.3	16.1	6.35
26	9.0	10.2	7.3	7.4	17.1	6.3
27	8.9	14.45	7.0	7.7	17.3	6.6
28	9.5	18.8	6.8	8.6	14.1	6.6
29	9.95	.....	6.8	9.0	13.4	12.0
30	9.0	.....	6.7	8.2	8.9	9.0
31	8.9	.....	6.7	.....	9.5	.....

Gage heights May 15 and June 25 were obtained by interpolation.

Little Wabash River near Golden Gate, Ill.

This station is located at the Southern Railroad bridge, about one mile west of Golden Gate, Ill. It was established Aug. 17, 1908, for the purpose of collecting data for use in drainage and flood control investigations.

Elm creek is tributary from the right bank about one mile above the station. The total drainage area above the gaging section is about 1,780 square miles.

The datum of the gage has not been changed since its installation, and the records are accurate and reliable.

The stream does not go dry at this point. This station is affected by backwater from the Wabash river. Therefore, the relationship between gage heights and discharge is variable and hence daily discharges could not be determined from the data at present available.

Little Wabash River.

Discharge Measurements of Little Wabash River near Golden Gate, Ill., for 1908 to 1910.

Date.		Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1908							
July	17	R. J. Taylor	75	301	0.06	2.6	19
May	9	Hidinger & Baxter, U. S. Dept. of Agriculture	1438	17200	2.09	28.5	*35900
1909							
March	10	Wm. M. O'Neill	1220	9748	0.99	23.50	9654
May	4	H. J. Jackson	88	578	0.61	6.00	351
May	5	H. J. Jackson	85	550	0.56	5.60	306
November	11	H. J. Jackson	75	311	0.19	2.80	60
1910							
March	2	H. J. Jackson	1228	9415	0.97	23.59	9150
March	7	H. J. Jackson	1252	13079	0.73	25.42	9520
March	9	H. J. Jackson	1239	11889	0.71	24.56	8395
March	12	H. J. Jackson	1215	7647	0.55	22.23	4241
March	14	H. J. Jackson	207	2362	0.88	18.65	2085
March	15	H. J. Jackson	155	1758	0.66	15.50	1161
March	16	H. J. Jackson	124	1067	0.70	10.25	747
March	17	H. J. Jackson	93	630	0.65	6.48	410

* Free flow, no backwater. This measurement was taken after the heavy rain storm of May 3-8, 1908.

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River near Golden Gate, Ill., for 1908 to 1910.

1908.

Day.	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	2.0	2.0	1.9	2.6
2	.....	2.0	2.0	1.8	2.6
3	.....	1.9	1.9	1.9	2.6
4	.....	1.9	1.9	1.9	2.5
5	.....	1.8	1.9	1.9	3.5
6	.....	1.9	2.0	1.9	3.5
7	.....	1.9	2.0	2.0	3.4
8	.....	1.9	2.0	2.0	3.1
9	.....	1.8	2.0	2.0	2.7
10	.....	1.8	2.0	2.1	2.5
11	.....	1.8	2.5	2.1	2.5
12	.....	1.8	2.1	2.1	2.4
13	.....	1.8	2.1	2.1	2.3
14	.....	1.8	2.1	2.0	2.2
15	.....	1.8	2.0	2.0	2.2
16	.....	1.8	2.1	2.0	2.1
17	1.9	1.7	2.0	2.0	2.1
18	2.0	1.8	2.0	2.1	2.1
19	2.0	1.8	2.0	2.1	2.1
20	2.1	1.7	2.2	2.1	2.0
21	2.2	1.7	2.1	2.1	2.0
22	2.2	1.7	2.0	2.3	1.9
23	2.0	1.7	1.9	2.2	1.9
24	2.1	1.7	1.9	2.2	1.9
25	2.1	1.7	1.9	2.2	1.7
26	2.0	1.8	1.8	2.5	1.7
27	2.2	1.8	1.8	2.6	1.6
28	2.2	2.0	1.8	2.7	1.7
29	2.0	2.0	1.8	2.7	1.7
30	2.0	1.9	1.9	2.7	1.8
31	2.0	.....	1.9	.....	1.8

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River near Golden Gate, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.9	2.8	22.8	4.8	11.0	7.7	7.7	4.1	2.5	2.6	3.3	4.7
2	1.8	2.7	22.4	4.5	9.1	5.3	7.7	4.0	2.6	2.4	3.0	4.3
3	1.9	3.3	21.8	3.8	8.0	5.1	6.9	4.9	2.4	2.3	2.6	4.0
4	1.8	4.4	21.0	4.3	7.5	6.9	5.5	5.8	2.3	2.1	2.5	3.8
5	1.7	4.8	19.2	4.1	6.1	10.9	4.5	4.9	2.3	2.3	2.4	4.0
6	1.7	4.0	16.1	4.1	5.7	14.4	4.0	4.7	2.3	2.2	2.7	4.1
7	1.7	3.9	16.1	5.8	5.2	14.9	3.5	3.8	2.2	2.2	2.4	4.2
8	1.6	4.1	17.7	4.2	5.1	15.5	*5.4	3.4	2.2	2.2	2.3	3.7
9	1.6	5.9	22.8	5.8	5.7	14.5	7.3	3.2	2.3	2.1	2.4	4.0
10	1.6	8.9	22.6	11.1	5.8	11.5	9.9	3.7	3.5	2.2	2.4	4.2
11	1.6	7.5	24.8	12.1	5.2	9.7	12.7	2.9	4.3	2.2	2.7	4.3
12	1.6	7.6	25.8	13.8	8.0	6.6	13.8	2.8	6.2	2.1	3.4	6.4
13	1.6	7.7	25.2	15.4	8.7	7.8	14.2	3.0	5.9	2.1	3.7	13.6
14	1.6	10.6	25.1	16.6	8.9	11.0	15.3	3.3	4.9	2.0	3.8	16.3
15	1.6	15.5	24.8	17.6	9.0	9.9	15.5	3.0	4.6	2.1	6.1	17.3
16	1.6	16.0	24.5	18.1	8.4	9.1	17.4	2.9	3.6	1.9	6.1	18.4
17	1.6	17.0	24.0	18.1	9.0	9.0	*18.2	3.0	3.0	2.2	7.7	19.1
18	1.6	16.1	23.5	17.8	7.2	8.0	18.3	2.9	2.7	2.5	9.0	19.1
19	1.6	16.1	22.8	18.2	7.3	6.4	18.3	2.7	2.6	2.7	10.0	19.0
20	1.7	18.0	21.6	20.6	7.2	5.9	18.2	2.6	2.5	2.9	9.8	19.0
21	1.7	18.7	19.5	22.1	7.1	5.8	17.6	2.5	2.4	3.6	7.5	18.8
22	1.9	18.8	17.3	22.4	6.9	6.1	17.1	2.4	2.6	3.7	6.7	17.9
23	2.1	19.1	13.3	22.2	4.9	5.1	16.9	2.5	3.1	5.6	6.0	14.3
24	2.0	20.9	9.5	21.8	4.1	6.9	16.7	2.4	3.1	5.7	8.2	8.5
25	2.3	22.0	5.8	21.8	4.0	9.1	15.7	2.3	3.0	6.1	12.0	7.5
26	2.8	22.5	5.3	21.8	4.2	10.1	10.5	2.3	4.9	5.3	13.2	5.4
27	2.7	23.5	5.2	19.0	4.9	9.1	10.4	2.4	4.6	4.7	12.8	5.4
28	3.2	22.8	6.6	18.0	6.7	8.8	10.6	2.3	3.6	4.6	11.1	4.6
29	3.9	.....	7.0	17.3	8.3	8.2	4.7	3.3	3.5	4.5	8.0	4.1
30	3.6	.....	6.6	9.3	9.9	8.5	4.7	2.4	3.1	4.0	6.7	4.0
31	3.0	.....	5.5	.....	7.7	.....	4.4	2.5	.....	3.6	.....	3.9

* Interpolated.
Gage heights Dec. 8-31 were affected by ice conditions

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River near Golden Gate, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	3.7	7.7	22.2	3.3	6.5	7.0
2	4.7	6.9	23.3	3.0	6.0	6.1
3	5.1	6.2	24.3	3.3	6.5	6.2
4	5.2	5.9	25.4	3.2	5.3	5.1
5	5.3	7.2	25.8	3.1	4.7	4.4
6	6.2	9.5	25.8	3.0	4.3	4.2
7	8.0	9.0	25.5	3.4	7.3	4.3
8	7.7	7.4	25.1	3.5	8.1	6.5
9	7.3	6.9	24.7	3.8	6.7	6.6
10	7.0	6.0	24.3	3.8	5.6	5.5
11	6.6	5.4	23.6	3.4	7.5	4.6
12	5.0	5.2	22.7	3.8	8.9	4.1
13	8.0	4.3	21.3	5.7	7.5	4.1
14	14.8	4.5	19.7	5.0	7.0	4.7
15	16.5	4.5	16.7	4.6	11.2	4.3
16	17.2	4.5	12.4	5.1	11.5	3.9
17	17.6	4.4	7.6	7.4	9.9	3.5
18	18.0	5.5	4.9	9.7	7.5	3.3
19	18.5	5.9	4.6	12.0	7.4	3.1
20	19.6	7.1	4.4	11.5	6.5	3.0
21	20.3	7.5	4.1	9.9	5.1	3.0
22	20.3	9.4	4.1	8.1	4.5	5.9
23	20.5	12.9	4.1	6.5	4.6	5.4
24	20.3	14.6	4.0	6.0	7.9	4.9
25	19.7	15.4	3.9	5.5	9.9	4.2
26	18.8	15.8	3.8	5.6	12.1	3.5
27	16.5	17.9	3.9	6.0	12.6	3.0
28	12.5	20.1	3.8	6.5	13.0	3.5
29	9.8	.....	3.6	6.7	13.0	4.4
30	9.0	.....	3.5	7.0	11.5	5.4
31	8.9	.....	3.4	.....	9.0	.....

Gage heights Jan. 1-12 were affected by ice conditions.

Little Wabash River at Carmi, Ill.

This station is located at the highway bridge in the northeastern part of Carmi, Ill., about one-fourth mile below the Big Four and L. & N. Railroad bridge. It was established Oct. 9, 1908, to obtain data for use in studying drainage, flood control and levee construction.

Skillet Fork river is tributary on the right bank about four and one-half miles above the station. The drainage area above the gaging section is about 3,090 square miles.

The relation between discharge and gage height at this station is affected by backwater from the Wabash and Ohio rivers, especially during extreme floods.

The datum of the gage has remained unchanged since its installation. The records are accurate and reliable, but are affected by backwater, as stated above.

The following high water marks have been preserved at this station: 1875, gage height 33.5 feet; about 1895, gage height 31 feet; 1897, gage

height 34.5 feet; and 1898, gage height 36 feet; all based on present gage datum. These high water records are accurate and authentic. There is some possibility that the dates may be slightly in error.

On account of backwater conditions at this station the daily discharge cannot be determined with the data at present available.

Little Wabash River.

Discharge Measurements of Little Wabash River at Carmi, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height—Feet.	Discharge—Sec. ft.
1909						
May 1	H. J. Jackson	222	2887	2.13	13.30	4876
May 2	H. J. Jackson	187	1082	1.98	7.61	2139
November 12	H. J. Jackson	125	115	0.57	1.88	65
1910						
June 10	C. F. Bailey	156	324	2.33	3.54	757

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River at Carmi, Ill., for 1908 to 1910.

1908.

Day.	Oct.	Nov.	Dec.
1	.....	1.7	2.0
2	.....	1.7	2.0
3	.....	1.6	1.9
4	.....	1.6	1.9
5	.....	1.6	1.9
6	.....	1.6	1.9
7	.....	1.6	2.0
8	.....	1.6	2.2
9	.....	1.6	2.2
10	.....	1.6	2.2
11	.....	1.6	2.1
12	1.7	1.7	2.0
13	1.7	1.7	2.0
14	1.7	1.7	2.0
15	1.7	1.7	1.9
16	1.8	1.7	1.9
17	1.8	1.7	1.9
18	1.8	1.7	1.9
19	1.8	1.7	1.9
20	1.8	1.7	1.9
21	2.1	1.7	1.9
22	1.9	1.7	1.9
23	1.8	1.7	1.9
24	1.8	2.0	1.9
25	1.7	2.0	1.9
26	1.7	2.1	1.8
27	1.7	2.1	1.8
28	1.7	2.1	1.8
29	1.7	2.1	1.8
30	1.7	2.0	1.9
31	1.7	.....	1.9

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River at Carmi, Ill., for 1908 to 1910.

1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.8	2.3	23.3	3.2	12.7	4.8	4.6	2.4	1.8	2.2	2.3	3.4
2	1.8	2.3	23.65	2.9	7.75	3.8	4.1	2.6	1.8	2.1	2.2	2.85
3	1.9	2.2	23.65	2.7	5.4	3.2	3.7	3.5	1.8	2.0	2.1	2.6
4	1.9	2.5	23.45	2.6	4.75	5.8	3.5	3.7	1.8	2.0	2.0	2.45
5	2.3	3.1	22.9	2.5	4.6	6.8	3.0	3.7	1.8	1.9	2.0	2.4
6	2.6	3.0	21.7	2.4	4.7	9.0	2.6	3.3	1.8	1.9	1.9	2.35
7	2.4	2.7	19.45	3.0	5.2	10.8	2.5	2.6	1.8	1.8	1.9	2.35
8	2.2	2.7	17.75	4.0	5.8	11.7	2.7	2.4	1.8	1.8	1.9	2.3
9	2.0	2.9	22.35	3.9	6.5	11.7	2.5	2.2	1.8	1.8	1.9	2.25
10	2.0	3.3	23.0	4.0	6.9	10.6	3.3	2.1	2.2	1.8	1.9	2.3
11	2.2	4.5	22.8	5.8	7.1	7.9	6.1	2.1	2.4	1.7	1.8	2.8
12	2.3	4.9	23.85	6.9	6.9	5.2	7.9	2.0	2.4	1.7	1.8	4.5
13	2.1	5.7	25.55	9.4	6.8	7.1	16.0	2.0	3.0	1.7	2.0	6.3
14	1.9	8.15	26.9	12.9	7.5	9.1	15.7	1.9	3.3	1.7	2.2	10.05
15	1.9	12.4	27.75	13.7	7.5	9.3	14.0	1.9	3.0	1.7	2.3	12.1
16	1.9	13.45	28.1	14.5	6.5	9.1	19.9	1.9	2.6	1.7	3.0	13.05
17	1.9	13.7	28.05	15.2	5.3	8.3	18.6	1.9	2.4	1.7	4.15	13.9
18	1.9	14.2	27.6	15.75	5.5	7.1	16.4	1.9	2.2	1.7	4.7	14.35
19	1.9	16.45	27.0	16.25	5.1	5.3	14.1	1.9	2.1	1.8	5.3	14.75
20	1.8	17.65	26.1	19.4	4.2	3.8	12.7	1.9	2.0	1.9	6.5	14.75
21	1.9	17.2	24.9	20.85	3.4	3.4	11.8	1.9	1.9	2.0	6.5	13.9
22	1.9	16.85	23.15	21.4	3.0	3.4	11.0	1.8	2.1	2.0	5.4	13.25
23	1.9	20.8	20.5	21.5	2.7	3.4	10.5	1.8	2.0	2.4	4.3	12.5
24	2.0	22.3	15.95	21.6	2.5	3.3	10.2	1.8	2.0	2.7	3.65	10.0
25	2.0	21.95	9.8	21.55	2.6	4.7	9.8	1.8	2.1	3.0	5.2	6.0
26	2.3	21.8	5.0	21.3	2.6	6.8	8.8	1.8	2.4	3.0	7.3	3.8
27	2.4	22.15	3.55	20.5	5.5	6.3	6.0	1.8	2.7	3.0	8.4	3.15
28	2.4	22 7	3.2	19.2	5.2	5.5	3.6	1.8	2.7	2.9	7.95	2.95
29	2.5	.....	3.45	16.9	5.0	5.0	2.9	1.8	2.5	2.7	6.55	3.15
30	2.5	.....	3.7	17.05	6.3	4.7	2.6	1.8	2.3	2.6	4.7	3.15
31	2.4	.....	3.4	.....	6.0	.....	2.4	1.8	.....	2.4	.....	3.0

Gage heights Jan. 1-13 and Dec. 8-31 were affected by ice conditions.

Little Wabash River.

Daily Gage Height in Feet of Little Wabash River at Carmi, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	2.3	11.4	19.9	2.25	4.65	4.5
2	2.4	9.4	20.3	2.25	4.55	3.25
3	2.5	6.7	21.35	2.25	5.25	3.2
4	2.7	4.1	22.9	2.25	4.55	3.1
5	3.5	3.5	24.2	2.2	3.6	3.05
6	4.7	4.25	25.5	2.2	3.1	2.6
7	4.9	5.5	26.4	2.15	3.05	2.5
8	5.0	5.5	26.95	2.15	4.3	2.4
9	5.45	4.9	27.15	2.2	4.75	3.25
10	5.1	4.1	27.05	2.3	4.0	3.5
11	4.55	3.35	26.7	2.35	3.7	3.25
12	3.5	3.1	26.1	2.55	5.05	2.8
13	6.3	2.8	25.2	2.7	5.55	2.6
14	11.15	2.75	24.0	3.0	5.05	2.45
15	12.45	2.7	22.15	3.3	5.05	2.55
16	13.0	2.7	19.0	3.45	6.35	2.5
17	13.7	2.8	13.8	4.65	6.55	2.4
18	15.6	2.8	8.0	5.35	5.55	2.25
19	15.4	2.7	3.9	6.95	4.3	2.2
20	16.75	3.3	2.9	7.8	4.0	2.1
21	17.3	3.95	2.75	7.55	3.45	2.1
22	17.9	5.3	2.6	6.3	3.05	2.1
23	18.35	8.05	2.55	5.0	3.25	2.65
24	18.5	9.35	2.5	3.95	4.25	3.25
25	18.35	11.1	2.45	3.65	5.1	2.95
26	17.65	12.4	2.45	3.55	6.5	2.55
27	16.8	16.65	2.4	4.3	7.45	2.4
28	15.7	19.4	2.35	4.8	7.75	2.35
29	14.15	.....	2.35	4.85	7.65	2.3
30	13.25	.....	2.3	4.75	7.3	2.3
31	12.5	.....	2.3	.....	6.4	.....

Skillet Fork River near Mill Shoals, Ill.

This station is located at the B. & O. Railroad bridge, about one mile south of Mill Shoals, Ill. It was established Oct. 9, 1908, for the purpose of obtaining data for use in studying drainage and flood control problems.

Griffin creek is tributary on the left bank about one and one-half miles above the station, and Haw creek is tributary on the right bank about five miles above the station. The drainage area above the gaging section is about 912 square miles.

The datum of the gage has remained unchanged since its installation, and the records are accurate and reliable.

This station is affected by backwater caused by floods on the Wabash river. Sufficient data are not available at present to enable the daily discharge to be determined.

Little Wabash River.

Discharge Measurements of Skillet Fork River near Mill Shoals, Ill., for 1908 to 1910.

Date.	Hydrographer.	Width—Feet.	Area of section—Sq. ft.	Mean velocity—Ft. per sec.	Gage height Feet.	Discharge—Sec. ft.
1909						
May 3	H. J. Jackson	61	198	1.08	5.22	214
November 9	H. J. Jackson	38	31	0.35	2.26	11
1910						
March 1	H. J. Jackson	791	3396	1.01	19.65	3445
March 3	H. J. Jackson	1060	5856	0.93	22.12	5460
March 5	H. J. Jackson	1067	7009	0.81	23.11	5644
March 8	H. J. Jackson	1063	6632	0.65	22.82	4334
March 10	H. J. Jackson	1058	5505	0.61	21.80	3380
March 12	H. J. Jackson	1031	4124	0.56	20.45	2283
March 14	H. J. Jackson	141	1451	0.99	18.03	1443
March 15	H. J. Jackson	124	1109	0.84	15.46	935
March 16	H. J. Jackson	91	660	0.79	11.43	519
March 17	H. J. Jackson	70	325	0.66	7.50	216
March 18	H. J. Jackson	59	150	0.77	4.70	117

Little Wabash River.

Daily Gage Height in Feet of Skillet Fork River near Mill Shoals, Ill., for 1908 to 1910.

1908.

Day.	Oct.	Nov.	Dec.
1		1.5	1.6
2		1.5	1.6
3		1.5	1.6
4		1.5	1.6
5		1.5	1.6
6		1.5	1.6
7		1.5	1.6
8		1.5	1.6
9		1.5	1.6
10		1.5	1.6
11		1.5	1.6
12	1.5	1.5	1.6
13	1.5	1.5	1.6
14	1.5	1.5	1.6
15	1.5	1.5	1.6
16	1.5	1.5	1.6
17	1.5	1.5	1.6
18	1.5	1.5	1.6
19	1.5	1.5	1.6
20	1.5	1.5	1.6
21	1.5	1.5	1.6
22	1.5	1.5	1.6
23	1.5	1.5	1.6
24	1.5	1.5	1.6
25	1.5	1.5	1.6
26	1.5	1.9	1.6
27	1.5	1.6	1.6
28	1.5	1.6	1.6
29	1.5	1.6	1.6
30	1.5	1.6	1.6
31	1.5		1.6

Little Wabash River.

Daily Gage Height in Feet of Skillet Fork River near Mill Shoals, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.6	3.0	21.0	4.5	11.4	5.7	4.1	5.6	1.4	2.4	2.6	3.4
2	*1.6	3.0	20.1	3.7	8.8	4.5	3.7	6.4	1.4	2.2	2.6	3.3
3	*1.6	3.2	18.0	3.5	5.2	5.6	3.5	8.9	1.4	2.2	2.4	3.2
4	1.6	3.4	14.5	3.4	4.9	9.3	3.0	8.5	1.4	2.0	2.3	3.2
5	1.6	3.4	13.0	3.3	4.4	13.8	2.5	7.3	1.4	2.0	2.2	3.1
6	*1.6	4.0	12.5	4.8	4.1	14.6	2.5	3.5	1.4	2.0	2.2	2.9
7	1.6	4.3	10.5	8.4	3.9	14.5	2.5	3.4	1.4	2.0	2.2	2.7
8	*1.6	4.5	11.0	8.3	3.9	13 1	2.3	3.2	1.4	2.0	2.2	2.6
9	1.6	4.5	18.5	8.2	4.5	8.9	2.3	3.0	1.4	1.5	2.2	2.7
10	*1.6	4.9	19.8	8.4	5.6	6.8	3.8	2.8	1.7	1.5	2.2	3.5
11	1.6	5.4	23.3	6.4	6.6	4.7	5.3	2.7	1.9	1.5	2.2	3.9
12	1.6	5.8	24.1	5.5	6.2	4.2	8.1	2.5	4.7	1.8	2.2	6.3
13	1.6	6.5	24.2	7.2	5.4	6.9	13.1	2.4	4.0	1.6	2.2	12.3
14	1.6	11.4	24.4	15.5	5.3	10.9	14.7	2.1	3.7	1.6	2.2	15.0
15	1.6	15.5	24.1	16.8	5.7	13 85	14.3	2.0	3.4	1.5	4.6	15.5
16	1.6	15.9	23.6	17.9	6.5	12.2	15.0	2.0	2.8	1.5	6.6	15.9
17	1.6	16.4	23.0	18.3	7.0	8.8	11.0	1.8	2.6	1.5	6.8	16.3
18	1.6	16.9	22.6	17.8	6.0	5.9	6.3	1.7	2.4	1.6	7.6	16.4
19	1.6	17.8	21.8	17.6	5.1	4.8	5.4	1.6	2.3	2.0	9.5	15.1
20	1.6	17.5	21.0	18.3	4.6	4.6	5.3	1.6	2.2	2.0	8.5	9.3
21	1.6	17 8	19.4	18.8	3.8	4.5	5.0	1.6	2.2	2.5	7.3	8.0
22	1.6	18 0	18.0	19.5	3.3	3.8	4.5	1.6	2.2	3.5	5.0	6.3
23	1.6	19.0	17.3	19.9	3.0	4.5	3.8	1.6	2.9	4.0	5.0	5.2
24	1.6	20.4	15.1	20.1	2.7	5.5	3.6	1.5	4.9	4.0	6.1	5.0
25	1.9	20.9	13.2	20.2	2.7	6.6	3.4	1.5	4.3	5.0	9.5	4.5
26	3.5	21.0	8.9	20.0	3.0	6.9	3.0	1.4	4.1	5.2	8.9	3.5
27	3.5	21.2	5.4	19.3	6.4	6.7	2.5	1.4	3.6	4.2	7.8	3.4
28	3.5	21.4	5.9	17.8	9.9	5.7	2.4	1.4	3.1	3.9	6.3	3.2
29	3.5	.....	5.9	14.8	12.4	5 5	2.2	1.4	2.8	3.5	5.2	*3.1
30	3.3	.....	4.9	12.4	10.9	5.0	2.1	1.4	2.5	3.0	4.0	*3.0
31	3.0	.....	4.5	.....	8.9	.....	2.5	1.4	.....	2.8	.....	*3.0

*Gage heights Jan. 2, 3, 6, 8 and 10 were obtained by interpolation.
*Gage heights Dec. 29, 30 and 31 were read to top of ice.

Little Wabash River.

Daily Gage Height in Feet of Skillet Fork River near Mill Shoals, Ill., for 1908 to 1910.

1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	3.1	5.5	19.8	2.8	6.2	3.1
2	3.3	5.0	21.2	2.7	5.4	2.9
3	3.4	4.8	22.3	2.7	5.0	2.6
4	3.4	4.8	22.9	2.6	4.5	2.5
5	4.1	5.4	23.3	2.5	4.4	2.5
6	5.0	6.0	23.4	2.6	4.4	2.4
7	6.5	6.0	22.9	2.6	4.4	2.2
8	7.0	5.8	22.7	2.8	4.3	3.1
9	6.9	4.9	22.2	3.5	4.2	3.5
10	6.8	4.4	21.6	3.4	4.4	3.7
11	5.0	4.3	21.0	3.3	4.6	3.6
12	4.2	4.0	20.4	3.3	5.5	3.0
13	11.4	4.0	19.6	3.7	6.0	2.9
14	13.5	3.9	17.5	4.05	6.4	2.6
15	14.9	3.9	11.8	4.4	6.0	2.4
16	15.4	4.7	10.7	4.7	5.3	2.3
17	16.3	4.5	6.0	8.4	4.5	2.3
18	16.5	5.1	4.3	9.5	4.2	2.2
19	16.9	5.4	3.8	9.0	3.9	2.0
20	17.3	5.6	3.8	8.3	3.6	1.9
21	17.3	7.1	3.4	7.0	3.4	1.8
22	16.9	9.2	3.4	6.5	3.2	1.7
23	15.7	13.4	3.3	6.3	7.2	1.7
24	15.3	14.4	3.2	6.0	8.1	1.6
25	11.3	14.3	3.2	5.9	9.3	1.6
26	8.6	13.5	3.2	5.65	9.3	1.6
27	7.7	17.4	3.2	6.9	7.1	1.6
28	7.0	19.3	3.1	7.8	5.0	1.5
29	6.8	.....	2.9	7.6	4.5	1.6
30	6.6	.....	2.8	7.0	4.0	1.6
31	6.2	.....	2.8	.....	3.5	.....

Gage heights Jan. 1-12 were affected by ice conditions.

Appendix.

CLIMATOLOGICAL DATA.

Section 64—Precipitation in Northern Illinois.

Aledo, Mercer County, Ill.—Elevation, 738 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.35	.....
1901	1.44	1.88	2.72	1.28	1.93	2.28	2.16	0.44	2.36	0.87	1.06	0.91	19.33
1902	0.58	0.82	2.57	3.39	5.36	7.81	8.79	6.89	5.11	3.51	2.10	1.96	48.89
1903	0.73	1.53	1.86	3.60	6.26	3.84	1.89	6.53	6.35	5.09	0.98	0.66	39.32
1904	1.84	0.37	2.78	1.95	3.33	2.03	4.49	7.58	3.62	0.62	0.15	1.75	30.51
1905	0.58	1.52	2.06	3.72	3.24	4.52	2.46	2.14	1.70	2.33	2.05	1.29	27.61
1906	2.57	2.28	2.42	2.40	1.37	4.91	1.18	3.20	5.63	1.57	3.12	1.67	35.32
1907	4.10	0.26	2.87	2.27	5.13	2.66	6.74	5.60	2.02	0.62	1.40	0.54	34.21
1908	0.47	2.58	1.85	2.20	6.88	4.93	3.98	5.73	1.92	1.40	2.63	0.72	35.29
Means	1.54	1.40	2.39	2.60	4.56	3.81	3.96	3.51	3.59	2.00	1.69	1.22	32.27

Section 64—Precipitation in Northern Illinois.

Antioch, Lake County, Ill.—Elevation, 861 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1901	.....	.....	.....	.....	.....	.....	2.85	1.31	1.97	0.61	0.66	0.90	.....
1902	0.45	1.40	1.95	1.30	7.45	5.90	6.25	0.55	7.35	3.67	1.80	0.70	38.77
1903	0.35	0.60	2.60	2.55	3.65	2.90	6.60	7.95	6.35	0.80	0.70	1.10	36.15
1904	0.55	1.10	5.20	2.20	1.90	1.39	4.11	2.20	4.55	1.20	0.75	1.30	26.75
1905	1.00	2.05	2.65	.....	4.45	2.95	5.80	5.20	2.80	.....	1.70	1.55	.....
1906	3.20	2.40	0.60	1.95	2.10	2.95	1.65	5.33	5.87	2.25	3.30	1.15	32.75
1907	3.80	0.30	1.65	0.95	5.20	1.80	2.02	3.96	5.43	1.05	1.87	2.10	33.22
1908	2.55	2.20	3.35	1.85	5.26	3.60	4.29	1.57	1.00	1.15	2.70	1.00	33.52
Means	1.70	1.44	2.57	2.30	4.30	3.50	4.23	3.51	4.42	1.53	1.68	1.22	32.40

Section 64—Precipitation in Northern Illinois.

Ashton, Lee County, Ill.—Elevation, 830 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.	Annual.
1895.....	.....	.....	0.65	0.42	3.15	3.72	3.74	3.56	1.22	0.77	2.33	2.99	.....
1896.....	0.57	1.62	1.33	3.71	5.74	3.55	4.71	2.04	6.49	0.87	2.32	0.37	33.32
1897.....	4.15	1.51	4.21	3.19	1.58	3.07	0.99	0.45	1.03	0.32	2.21	1.30	24.01
1898.....	2.69	2.14	4.78	2.48	3.45	3.00	1.60	8.61	3.61	2.85	1.97	1.17	38.35
1899.....	0.48	1.66	2.21	1.21	6.04	1.18	2.98	1.29	1.51	1.99	0.63	1.94	23.12
1900.....	1.34	2.47	2.42	1.45	5.80	1.43	4.60	9.34	3.51	2.80	2.00	0.40	37.56
1901.....	0.91	1.16	3.12	0.46	2.68	2.02	1.14	0.44	2.13	0.73	1.33	0.99	20.11
1902.....	0.73	1.36	1.76	1.51	6.72	10.41	7.26	2.51	4.09	4.18	2.38	1.69	44.60
1903.....	0.94	1.32	3.14	4.62	2.91	1.69	6.29	4.95	6.98	3.40	0.62	1.80	38.66
1904.....	2.18	2.09	4.03	3.10	2.92	1.32	4.35	4.51	3.98	0.93	0.02	2.71	32.14
1905.....	0.50	2.34	3.46	3.95	5.39	2.73	2.02	4.25	0.70	2.52	1.69	1.17	30.72
1906.....	2.40	2.72	3.32	1.81	6.59	7.45	2.38	2.82	4.72	2.28	2.79	2.00	41.28
1907.....	4.13	0.61	2.12	1.95	5.10	4.90	6.98	5.31	.....	.....	.....	.....	.....
1908.....	0.35	3.35	3.43	2.32	8.35	2.55	3.72	3.37	0.78	1.01	2.05	0.53	31.81
Means.....	1.64	1.87	2.86	2.30	4.74	3.50	3.98	3.82	3.13	1.90	1.72	1.47	32.93

Section 64—Precipitation in Northern Illinois.

Aurora, Kane County, Ill.—Elevation, 687 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1857	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.40	2.57	1.00	.....
1858	2.19	1.34	2.38	5.19	6.83	5.07	5.69	3.84	5.01	3.91	3.64	2.41	47.50
1859	1.82	1.22	6.00	2.60	2.69	2.88	2.02	2.52	3.06	.53	3.08	0.75	30.47
1860	.....	1.62	0.66	2.28	4.57	3.13	6.10	1.67	3.01	.....	.....	2.95	.....
1861	1.05	2.40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1865	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.57	0.60	.....
1866	1.97	0.77	2.01	0.95	1.67	2.32	3.21	6.02	4.80	2.50	0.94	3.08	30.24
1867	2.45	3.30	1.49	2.39	5.24	3.41	2.98	2.79	2.54	1.21	2.17	1.29	31.26
1868	0.90	1.05	6.86	4.91	2.55	3.00	2.28	4.50	5.47	2.07	2.55	.....	.....
1869	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.63	.....
1870	5.48	2.45	1.92	1.58	1.35	1.63	5.50	3.31	3.63	4.63	1.51	1.37	34.36
1871	.....	1.80	3.04	2.33	4.48	4.75	1.75	1.97	0.73	3.41	2.58	2.21	.....
1872	0.35	0.65	2.76	.....	.....	.....	.....	.....	6.20	0.90	1.18	0.70	.....
1873	5.31	0.57	1.50	3.93	3.23	2.20	5.43	3.61	.....	2.50	1.30	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1879	.....	.....	.....	.....	.....	.....	0.38	1.56	0.76	2.40	4.17	1.70	.....
1880	4.08	3.55	2.25	4.36	6.10	3.91	5.63	7.46	3.22	2.14	1.03	0.76	44.49
1881	1.17	8.06	3.88	1.68	2.61	5.80	3.19	0.73	3.24	7.15	4.97	3.27	45.75
1882	1.14	2.95	2.83	5.98	5.04	†7.33	†3.89	4.70	1.39	3.21	2.10	2.47	43.03
1883	2.63	7.27	0.61	3.75	7.23	3.56	4.44	0.95	1.57	6.34	5.55	2.61	46.51
1884	1.21	3.74	2.30	2.66	2.26	2.18	6.38	2.48	2.42	4.61	1.90	4.59	36.76
1885	2.31	2.09	0.38	3.31	3.16	5.07	2.59	7.72	4.04	3.74	2.04	3.05	39.50
1886	3.63	1.76	3.00	4.24	5.39	1.27	0.36	2.97	5.60	1.80	1.26	1.18	32.46
1887	4.36	5.86	1.06	0.82	3.02	0.58	2.34	3.79	4.33	3.54	2.21	4.25	36.16
1888	1.40	1.56	3.19	2.08	5.16	0.98	3.20	5.66	1.89	3.10	3.27	2.61	34.10
1889	2.06	1.32	1.47	2.63	3.82	4.38	5.08	*1.21	3.82	1.11	2.87	2.53	32.30
1890	3.24	1.18	2.61	2.17	4.25	6.97	0.78	2.38	1.90	4.53	1.79	0.78	32.61
1891	2.35	2.28	2.57	3.94	2.14	3.24	2.35	5.01	0.66	0.68	4.21	1.66	31.09
1892	1.53	1.18	2.28	3.59	8.29	12.83	4.48	2.74	2.36	1.28	1.63	2.26	44.15
1893	1.36	2.25	2.69	4.65	2.10	3.05	1.19	0.32	2.70	3.20	2.99	2.60	29.10
1894	2.96	1.95	3.17	2.39	2.76	1.87	0.62	1.79	7.07	1.68	1.93	0.96	29.25
1895	1.53	0.50	1.14	1.18	3.34	1.66	3.83	4.80	1.17	1.11	5.41	5.89	31.86
1896	0.91	1.91	1.75	3.75	6.12	2.06	5.60	2.43	6.92	0.22	3.83	0.16	35.66
1897	6.02	1.73	3.58	3.04	1.06	5.25	4.45	2.23	0.85	0.21	3.89	1.32	33.63
1898	1.26	3.21	5.09	1.30	4.43	5.39	1.07	4.22	4.25	1.66	2.60	1.66	42.14
1899	0.55	1.75	2.92	0.49	7.34	1.59	4.82	1.84	2.23	2.13	1.05	1.61	28.32
1900	1.68	3.72	2.23	0.78	4.17	2.94	3.55	3.28	1.99	2.83	3.23	0.41	30.81
1901	1.39	1.73	1.11	0.39	0.71	1.81	4.79	1.06	2.34	1.27	1.21	1.49	22.21
1902	0.47	2.05	3.14	2.16	6.18	13.19	7.43	2.32	7.29	2.02	2.93	1.71	50.89
1903	0.83	1.94	3.94	1.23	3.11	4.09	5.59	5.39	7.46	2.69	0.54	1.74	41.54
1904	2.12	1.47	5.02	1.21	2.51	1.96	3.81	5.62	5.05	1.53	0.06	1.69	35.05
1905	0.93	1.33	2.33	3.85	5.91	6.16	2.72	4.00	2.36	2.32	2.21	1.35	35.50
1906	3.10	2.52	2.12	1.57	3.10	1.67	2.12	3.80	8.31	2.25	2.64	2.18	35.68
1907	3.69	0.26	3.17	2.00	4.90	3.70	5.51	6.72	6.08	1.43	1.62	1.07	40.15
1908	0.81	3.86	3.58	3.10	7.19	1.43	4.50	5.35	0.95	0.67	2.02	0.97	34.43
Means	2.24	2.30	2.75	2.82	4.11	3.80	3.63	3.46	3.56	2.57	2.42	1.97	35.63

† Interpolated from surrounding stations.

Section 64—Precipitation in Northern Illinois.

Cambridge, Henry County, Ill.—Elevation, 824 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1873	.....	.....	0.70	1.65	4.00	1.80	1.95	2.60	1.40	0.80	0.80	5.00	.....
1874	4.70	1.00	1.50	1.80	0.60	3.20	2.60	3.30	7.00	1.20	2.60	0.10	29.60
1875	1.20	5.00	1.00	2.80	1.90	4.20	7.60	1.15	5.30	2.10	0.60	2.60	34.45
1876	3.60	2.30	3.70	3.70	4.40	3.01	3.50	1.50	4.60	1.30	3.00	1.00	35.61
1877	2.20	.....	4.70	3.90	3.20	7.20	3.50	3.00	1.60	7.00	3.50	2.60	.....
1878	0.30	2.00	3.50	4.20	5.10	3.10	2.80	5.90	1.50	3.10	0.90	3.30	35.70
1879	1.00	2.00	4.00	1.90	2.10	3.70	4.60	3.20	1.80	1.80	2.60	2.20	30.90
1880	3.30	0.80	3.10	3.10	7.00	*6.00	*1.50	6.20	4.70	0.80	1.50	0.50	38.50
1881	3.00	5.00	3.90	2.50	0.50	7.81	1.50	0.10	5.60	7.90	0.50	1.30	39.60
1882	1.50	2.40	5.00	3.50	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.20	1.20	2.15	.....
1886	2.81	1.98	3.17	2.17	3.98	9.54	0.40	0.83	2.99	2.36	0.76	0.84	22.83
1887	2.71	4.77	0.70	0.86	1.80	1.39	1.95	5.74	2.95	2.97	1.24	3.17	30.25
1888	0.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*.....	*	*	*	*	*	*	*	*	*	*	*	*	*
1895	1.55	0.30	1.60	1.23	2.42	1.40	7.40	2.78	2.99	0.75	2.74	3.65	28.81
1896	0.92	1.10	1.24	4.55	4.33	2.89	6.20	3.54	5.45	1.46	1.21	0.63	33.52
1897	4.90	1.52	4.03	3.70	1.48	1.44	2.41	1.16	2.27	0.33	1.89	1.61	26.74
1898	3.34	1.77	6.15	2.89	9.30	9.88	1.17	6.57	2.72	4.06	1.91	0.60	50.36
1899	0.29	1.63	2.81	2.21	6.15	2.86	2.91	1.78	2.22	3.89	1.22	2.44	30.41
1900	1.65	3.04	3.40	1.74	4.11	0.93	2.70	8.19	3.24	2.72	2.16	0.05	34.23
1901	1.37	1.90	3.11	1.37	2.06	2.61	3.90	1.38	2.17	0.88	1.50	1.16	23.41
1902	0.62	1.36	2.90	2.48	4.38	7.89	11.55	4.64	5.99	4.19	2.11	2.05	50.16
1903	0.96	1.85	2.34	4.97	7.03	2.85	2.95	3.96	6.27	2.32	1.09	1.36	37.95
1904	2.08	1.00	3.65	1.84	3.40	1.58	10.39	5.60	5.83	0.27	0.21	2.14	37.99
1905	0.95	2.40	1.60	3.83	3.35	5.21	2.11	4.03	1.87	1.98	2.27	1.25	30.85
1906	3.11	2.13	3.65	2.07	2.16	5.69	1.87	1.91	4.26	1.47	3.53	1.88	33.73
1907	3.69	0.60	2.15	2.04	4.15	2.55	6.47	6.60	4.05	0.58	1.23	0.80	34.91
1908	0.70	3.11	2.55	.....	.....	.....	4.34	3.69	1.13	1.12	3.29	0.61	.....
Means	2.05	2.12	2.93	2.68	3.72	3.74	3.93	3.57	3.46	2.25	1.75	1.73	33.93

* Estimated.
All values prior to 1895 are for Geneseo, 10 miles distant.

Section 64—Precipitation in Northern Illinois.

Chicago, Cook County, Ill.—Elevation, 824 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1871	4.13	1.45	2.66	3.70	3.90	5.56	2.52	2.01	0.74	1.88	3.62	3.44	35.61
1872	0.68	0.84	3.79	3.03	3.24	3.45	3.09	2.59	6.43	0.65	1.06	0.22	29.07
1873	2.56	0.47	0.89	6.22	7.20	1.44	4.04	1.58	3.53	2.43	1.61	4.44	36.41
1874	3.47	1.51	2.15	2.67	2.08	3.25	0.58	3.15	3.76	2.55	2.83	0.63	28.63
1875	0.96	1.99	1.43	2.32	3.64	5.17	7.18	3.29	4.39	4.32	0.75	2.62	38.06
1876	3.22	3.90	4.04	2.07	1.85	5.96	3.11	3.66	3.74	1.20	3.25	0.48	36.48
1877	1.91	0.06	5.37	2.42	1.81	6.04	2.98	3.06	2.02	6.51	6.08	2.75	41.01
1878	1.31	2.12	4.39	5.57	5.22	3.02	6.09	3.66	1.99	5.17	0.83	2.58	41.95
1879	0.54	1.47	2.37	1.93	3.89	3.18	5.58	0.45	1.18	2.72	4.93	2.47	30.71
1880	3.53	2.91	2.25	5.20	4.97	3.50	3.07	4.47	2.25	3.19	0.87	1.11	37.32
1881	0.87	5.98	2.99	1.81	1.85	5.93	4.31	0.54	4.34	6.89	5.97	2.67	44.18
1882	1.55	2.24	3.43	6.72	5.52	5.71	3.43	4.96	0.91	3.40	1.48	1.99	41.34
1883	1.74	4.74	0.42	3.72	7.32	5.61	5.53	1.21	1.36	7.36	5.26	1.59	45.86
1884	1.39	3.27	5.16	3.05	1.53	2.11	3.71	2.50	2.29	3.59	1.80	4.21	34.61
1885	3.18	2.01	0.57	4.00	3.17	5.20	2.44	11.28	2.97	3.87	2.33	3.35	44.37
1886	3.56	1.51	1.79	1.29	1.00	0.94	1.53	3.38	6.93	1.42	1.66	1.76	26.77
1887	3.13	5.10	0.89	0.46	1.38	1.63	1.05	3.35	4.03	2.03	2.41	3.67	29.13
1888	1.56	1.51	2.99	2.13	6.22	1.66	3.93	2.10	0.98	2.95	2.89	1.94	30.86
1889	1.64	1.31	1.43	2.35	5.38	2.93	9.56	0.39	2.75	1.82	3.49	1.90	34.95
1890	2.98	2.42	2.10	3.23	5.13	3.25	2.57	2.58	1.39	4.20	1.59	1.25	32.69
1891	1.99	1.95	2.13	3.14	2.09	2.42	2.47	4.52	0.32	0.36	3.83	1.32	26.54
1892	1.99	1.57	2.21	2.17	6.77	10.58	2.23	1.85	1.31	1.54	2.68	1.63	36.56
1893	2.08	2.44	1.69	4.16	4.93	3.59	3.08	0.18	1.98	1.75	2.45	2.14	27.47
1894	1.55	2.13	2.66	2.65	3.35	1.96	0.60	0.60	8.28	0.84	1.18	1.66	27.46
1895	2.15	1.60	1.32	0.86	1.99	1.79	2.42	6.49	0.89	0.51	5.60	6.76	32.38
1896	1.12	3.48	1.26	2.79	4.16	2.82	3.61	3.52	6.70	1.36	2.16	0.16	33.14
1897	4.53	2.22	3.56	2.23	0.84	3.60	1.47	1.70	0.84	0.18	3.06	1.62	25.85
1898	3.54	2.59	4.60	0.76	2.23	5.30	1.94	3.63	3.16	3.26	2.25	1.11	33.77
1899	0.58	1.60	2.11	0.14	4.35	2.71	6.66	0.91	2.39	2.09	1.14	1.81	26.49
1900	1.21	3.52	1.58	1.02	3.59	2.06	4.64	4.24	1.56	1.35	3.30	0.58	28.65
1901	1.15	2.05	3.38	0.33	2.18	2.42	4.25	2.00	2.92	1.29	0.85	1.70	21.52
1902	0.66	1.53	4.16	2.26	5.08	6.45	5.78	1.44	4.83	1.45	2.03	1.90	37.57
1903	1.09	3.03	1.67	3.77	0.93	1.62	4.78	3.19	4.00	1.09	0.34	2.28	28.09
1904	2.25	1.71	4.57	3.01	1.54	0.55	2.76	4.00	2.65	1.58	0.31	1.21	26.14
1905	1.33	1.95	2.43	3.03	5.14	3.27	5.02	4.46	4.18	1.82	2.05	0.68	35.36
1906	1.67	2.37	1.61	1.86	2.09	1.87	4.84	1.43	5.54	2.05	3.08	2.46	30.87
1907	4.21	1.00	2.94	2.37	3.50	3.61	3.15	4.22	4.49	0.93	1.92	2.73	35.10
1908	2.05	3.72	3.18	2.81	6.74	1.48	1.45	6.35	2.09	0.84	2.67	1.18	34.83
Means	2.68	2.30	2.59	2.72	3.63	3.52	3.62	3.02	3.06	2.43	2.52	2.05	33.54

Section 64—Precipitation in Northern Illinois.

Davenport, Scott County, Iowa—Elevation, 606 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1871	.....	.....	.....	.....	.....	3.68	2.30	4.85	0.30	3.19	3.33	1.61	.....
1872	0.13	0.10	1.82	5.06	4.46	3.78	3.80	8.91	5.30	0.61	1.86	0.61	36.44
1873	3.56	0.77	1.43	3.96	6.37	2.16	2.37	0.51	1.00	1.48	0.63	3.84	28.08
1874	4.34	0.74	1.34	2.64	3.45	5.37	3.10	3.68	7.86	1.30	2.47	0.50	36.79
1875	0.38	1.09	0.88	2.30	2.01	4.91	9.36	1.73	4.05	1.63	0.57	3.08	31.99
1876	3.47	3.63	4.35	5.39	6.70	4.25	4.82	4.27	5.50	1.54	2.54	0.36	46.82
1877	1.41	0.07	3.91	3.28	2.82	5.80	3.42	3.21	1.45	4.88	2.53	2.32	35.10
1878	0.36	1.09	2.21	2.89	5.14	4.36	2.19	5.07	1.82	4.21	0.90	0.97	31.21
1879	0.79	1.09	1.80	1.54	5.83	4.57	5.87	4.33	1.43	0.92	4.70	1.02	33.89
1880	3.13	1.72	2.68	4.50	5.09	7.21	4.31	5.90	4.87	0.94	1.23	1.15	42.73
1881	1.34	4.14	3.33	1.11	1.34	7.94	0.91	0.83	5.59	6.85	2.19	1.71	37.28
1882	0.90	0.62	2.90	3.15	5.49	8.43	4.41	2.29	1.39	3.75	1.49	1.78	36.60
1883	1.16	4.42	0.73	3.33	5.46	4.38	3.66	1.02	0.73	5.13	3.58	0.99	34.59
1884	0.75	0.98	3.27	0.77	3.79	3.07	4.51	3.84	4.79	7.17	1.49	3.68	38.11
1885	2.10	1.20	0.17	2.47	1.94	2.08	1.66	12.68	4.19	2.71	1.20	1.95	34.35
1886	2.22	1.52	3.08	1.84	3.73	0.49	0.43	2.67	2.43	3.47	0.74	0.53	23.15
1887	1.43	4.87	0.77	1.17	1.76	1.66	3.09	3.23	5.45	3.41	1.13	3.26	31.23
1888	1.54	1.17	2.70	1.57	9.23	3.86	7.31	2.79	1.38	2.81	3.54	2.59	40.49
1889	0.95	1.44	1.74	3.89	6.34	5.59	8.25	1.11	3.27	1.26	2.17	1.60	37.61
1890	2.49	1.10	2.34	0.86	4.33	4.51	0.85	1.66	2.34	3.63	1.37	0.62	26.10
1891	2.38	0.89	1.68	3.30	2.74	3.56	3.29	5.54	1.50	1.37	3.56	1.64	31.45
1892	1.60	1.38	3.06	5.41	8.84	10.79	4.16	1.53	2.09	0.55	2.01	2.73	44.15
1893	1.14	1.69	2.25	4.50	2.67	3.82	1.75	1.12	3.36	0.80	2.56	1.67	27.33
1894	1.33	1.48	1.88	1.37	1.93	2.16	0.44	2.02	3.02	1.02	1.26	0.61	18.52
1895	1.27	0.38	1.57	0.32	2.28	1.22	5.16	4.79	4.30	0.81	2.50	2.54	27.14
1896	0.89	1.45	0.84	3.41	4.03	2.28	5.68	3.12	3.98	1.67	0.68	0.65	28.68
1897	3.58	1.57	2.82	3.69	1.91	1.37	3.21	0.68	1.52	0.35	1.68	1.53	23.91
1898	3.68	1.86	4.85	3.01	6.73	3.53	1.85	4.96	3.14	3.38	1.37	0.59	38.95
1899	0.31	1.91	1.94	2.94	7.35	4.02	2.84	4.47	0.82	1.46	0.90	2.68	31.64
1900	1.27	2.45	2.92	2.10	4.68	1.01	3.49	4.90	3.66	2.00	1.48	0.21	30.17
1901	1.10	1.59	2.57	0.88	1.37	3.02	1.48	0.46	2.29	0.45	0.79	1.33	17.33
1902	0.60	0.96	1.76	1.40	4.57	7.55	6.38	7.25	3.20	2.81	1.95	1.88	40.31
1903	0.79	1.67	2.06	3.42	5.52	2.28	4.47	4.68	7.09	2.27	0.70	0.78	35.73
1904	2.20	0.72	2.70	2.05	2.64	1.44	3.34	3.60	3.98	1.15	0.18	2.21	26.21
1905	0.63	1.99	2.21	3.45	3.12	7.68	0.99	1.93	3.48	2.73	2.01	1.32	31.54
1906	2.14	2.21	2.20	1.92	2.60	2.69	2.26	3.50	2.47	1.67	2.66	1.61	27.93
1907	3.55	0.22	1.79	1.90	4.33	2.07	7.13	6.48	3.55	0.70	1.08	0.49	33.29
1908	0.69	2.37	2.24	2.22	5.13	4.57	3.30	6.23	1.12	0.87	2.46	0.40	31.60
Means	1.66	1.58	2.24	2.68	4.26	4.03	3.63	3.73	3.15	2.29	1.83	1.55	32.63

Section 64—Precipitation in Northern Illinois.

Dixon, Lee County, Ill.—Elevation, 725 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov	Dec.	Annual.
‡1886.....	4.29	2.79	3.68	3.60	6.32	.....	0.32	1.33	2.94	.....	1.41	1.32	.....
‡1887.....	4.21	4.89	1.66	1.10	2.51	2.03	2.35	3.92	3.62	3.76	1.46	9.02	40.53
‡1888.....	2.55	1.40	1.89	1.77	7.08	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1892.....	2.22	1.69	2.24	3.27	8.93	7.61	3.84	1.94	2.56	1.07	1.67	2.52	39.56
1893.....	2.07	1.94	2.83	4.02	2.99	4.42	3.74	0.39	3.22	1.05	2.13	1.69	30.49
1894.....	2.15	1.97	3.12	2.04	4.28	1.91	0.15	†0.92	3.20	0.99	1.42	0.53	22.68
1895.....	1.22	0.43	0.83	1.17	4.46	1.62	4.59	2.83	1.81	0.82	2.50	2.00	24.28
1896.....	0.65	0.74	0.81	3.62	5.87	3.18	4.81	3.75	4.66	0.89	1.70	0.44	31.12
1897.....	3.00	1.25	4.25	3.43	0.96	5.27	1.97	0.56	2.00	0.48	1.90	1.17	26.24
1898.....	3.27	2.26	4.74	3.29	4.00	2.49	1.55	6.39	3.01	2.56	1.19	0.78	35.53
1899.....	0.30	1.25	1.67	1.56	6.76	1.91	2.82	1.83	1.48	3.48	0.56	1.81	25.43
1900.....	2.06	1.86	2.86	1.32	5.25	1.32	4.36	6.18	4.39	3.41	2.10	0.34	35.45
1901.....	1.09	0.54	2.98	0.34	2.28	2.48	8.98	0.53	2.36	0.90	1.00	1.13	24.61
1902.....	0.43	1.05	1.81	1.69	8.00	9.75	8.47	2.62	4.63	3.90	2.37	2.13	46.85
1903.....	2.76	0.90	3.07	4.20	4.35	1.46	4.91	5.64	6.13	3.21	0.73	1.16	38.52
1904.....	2.23	0.79	3.07	2.29	3.26	2.27	7.58	3.45	5.46	0.86	0.03	2.17	33.46
1905.....	0.32	1.24	3.35	3.66	6.15	3.35	1.97	4.15	1.23	3.15	1.83	1.12	31.52
1906.....	2.07	2.46	2.70	2.70	7.24	6.33	5.12	2.09	4.70	1.84	2.19	1.52	40.96
1907.....	3.43	0.22	2.08	2.11	4.89	3.19	8.76	5.33	4.95	1.71	1.23	0.59	38.49
1908.....	0.72	2.82	3.38	3.29	5.16	2.24	4.18	5.68	0.84	0.90	2.45	0.84	32.50
Means.....	2.05	1.62	2.65	2.52	5.04	3.49	4.24	3.13	3.33	1.94	1.57	1.70	33.28

† Estimated.
‡ Values prior to 1892 from Prairieville, 7 miles distant.

Section 64—Precipitation in Northern Illinois.

Dubuque, Dubuque County, Iowa—Elevation, 639 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1873	.....	.....	.....	.....	.....	.....	1.27	5.88	1.53	2.07	0.77	2.07	.....
1874	2.45	0.49	1.28	1.54	1.08	3.29	3.24	2.13	7.68	2.18	4.79	0.65	30.80
1875	1.00	2.12	1.45	2.71	3.62	4.75	5.74	1.07	7.10	2.71	0.48	2.71	35.46
1876	3.20	1.53	4.00	3.63	5.96	7.88	8.15	5.92	5.90	1.10	2.49	0.52	50.28
1877	0.96	0.26	4.53	3.74	3.84	6.75	2.90	3.96	0.67	5.35	3.31	2.70	38.97
1878	0.49	1.93	2.44	4.34	4.61	4.35	6.71	1.72	6.94	2.85	0.80	1.12	38.30
1879	0.44	1.00	1.20	2.02	2.94	4.99	6.78	2.43	2.98	0.93	5.41	1.28	32.40
1880	1.95	1.01	2.55	3.51	3.72	6.02	3.55	7.15	6.84	0.66	2.11	1.25	40.32
1881	1.87	3.75	3.78	1.30	2.20	7.56	10.53	2.46	10.26	6.70	3.19	1.55	55.15
1882	0.84	0.59	1.49	4.47	4.16	6.29	1.48	2.29	2.60	5.29	1.55	1.79	32.84
1883	1.59	2.60	0.32	1.93	7.13	5.34	7.90	2.70	2.09	4.44	1.65	1.88	39.57
1884	0.99	2.19	3.85	2.77	4.88	4.89	5.30	4.25	4.07	4.16	1.43	4.08	42.86
1885	1.80	0.72	0.41	3.69	2.62	6.16	6.35	8.02	4.58	2.32	0.64	3.14	40.45
1886	3.17	1.36	4.32	2.12	4.17	0.71	0.89	0.67	3.10	4.08	1.89	1.03	27.51
1887	3.33	3.56	1.80	1.37	2.53	1.32	2.44	4.40	7.62	2.22	0.74	3.07	34.40
1888	1.20	1.31	3.44	2.58	5.84	5.28	3.59	1.73	2.01	1.62	2.75	1.96	33.31
1889	1.55	1.34	0.30	3.56	4.00	3.87	4.22	0.26	1.54	0.66	1.57	1.38	24.25
1890	2.31	1.25	1.68	2.94	5.36	9.59	1.21	6.00	3.72	6.43	1.85	0.82	43.16
1891	1.27	0.98	2.69	1.63	2.54	2.34	4.59	3.31	0.68	2.20	3.24	2.08	27.55
1892	2.34	1.02	1.91	4.37	9.18	14.16	5.08	2.51	3.79	0.44	1.89	2.08	48.77
1893	1.60	1.30	2.52	4.32	3.06	5.49	3.57	0.58	3.31	1.66	2.03	1.33	30.77
1894	1.11	1.22	3.06	2.27	1.75	2.25	0.02	1.32	2.96	1.51	1.53	0.35	19.35
1895	1.44	0.66	0.99	0.49	2.63	1.05	3.00	1.75	2.06	0.80	2.12	2.75	19.74
1896	0.75	1.93	0.76	7.80	7.63	3.11	7.72	2.05	5.67	2.56	1.60	0.71	42 29
1897	2.55	1.43	2.97	3.39	2.09	2.36	4.34	1.51	3.19	1.02	1.23	2.08	28.16
1898	2.19	2.01	2.78	4.06	4.47	4.36	2.83	4.37	3.07	3.86	1.15	0.33	35.48
1899	0.51	0.67	1.52	4.24	5.75	4.08	4.12	1.95	0.99	1.63	0.97	1.85	28.28
1900	1.15	2.13	1.84	2.39	4.75	2.04	8.00	3.35	3.34	2.38	1.64	0.42	33.43
1901	1.07	1.07	2.88	1.01	3.10	1.23	2.31	0.25	3.72	1.64	0.67	1.44	20.39
1902	0.74	1.43	1.76	1.11	8.67	6.97	6.80	1.57	3.93	2.26	0.86	2.24	38.34
1903	0.17	1.19	1.84	3.29	4.25	2.16	7.10	5.27	3.20	1.72	0.75	0.80	31.79
1904	0.51	0.73	2.86	2.05	3.86	0.74	1.86	2.58	2.21	3.18	0.08	2.37	23.03
1905	0.95	1.58	2.27	3.07	4.06	4.33	1.51	3.07	1.25	3.88	2.64	1.17	29.78
1906	2.72	0.93	2.36	1.16	3.59	3.36	1.57	4.44	1.78	1.70	2.95	2.04	28.60
1907	1.72	0.52	0.99	2.48	2.66	4.08	5.15	5.85	6.01	0.77	1.29	0.67	32.19
1908	0.70	1.87	1.72	2.50	5.82	2.21	2.06	2.92	1.14	1.20	1.34	0.63	24.11
Means	1.50	1 42	2 19	2.85	4 24	4.44	4 27	3.10	3.71	2.50	1.82	1.62	33.66

Section 64—Precipitation in Northern Illinois.

Galva, Henry County, Ill.—Elevation, 842 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1864	.....	.....	.....	.....	.....	.....	.....	.....	2.31	1.94	2.37	2.93	.....
1865	3.00	2.95	2.31	4.44	2.56	2.87	4.31	5.25	7.50	2.25	0.19	0.40	38.03
1866	3.06	1.05	1.93	2.06	1.63	2.69	4.56	3.62	8.25	2.00	0.35	3.22	34.42
1867	0.75	1.75	1.95	2.27	6.41	1.62	1.77	2.82	0.82	0.87	1.99	1.25	24.27
1868	3.99	0.83	5.73	3.15	7.04	2.10	1.25	3.38	2.61	0.20	3.20	1.35	31.83
1869	1.17	2.86	1.64	2.07	5.80	12.43	3.73	7.01	.....	0.35	.....	.....	.....
1870	.....	.....	.....	.....	.....	0.38	0.66	3.15	.....	.....	.....	.....	.....
1871	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1872	.....	.....	.....	.....	.....	.....	3.13	5.60	5.03	0.70	1.15	2.20	.....
1873	2.15	0.25	0.43	5.53	5.11	1.60	3.12	1.15	2.18	1.76	1.08	.....	.....
1874	2.60	1.16	1.71	4.02	2.18	3.40	1.42	2.53	3.96	1.40	1.93	0.64	26.95
1875	0.14	0.46	1.08	2.62	4.22	4.72	6.66	0.70	2.16	1.24	0.63	1.96	26.59
1876	1.69	2.14	3.56	2.62	5.28	4.67	4.26	0.58	5.10	2.05	1.91	0.58	34.44
1877	.....	.....	2.18	3.15	2.71	8.87	3.36	1.89	1.05	4.93	3.20	2.56	.....
1878	0.24	1.30	2.40	4.87	4.43	3.18	2.16	6.34	1.02	3.20	0.60	2.20	31.67
1879	0.81	0.75	1.31	2.16	0.87	3.66	3.49	3.17	2.06	2.54	2.81	1.11	24.74
1880	3.28	2.30	3.18	3.54	5.23	3.26	2.31	2.52	1.74	1.73	1.83	1.24	32.16
1881	0.92	3.89	3.41	1.53	1.84	8.36	3.94	0.62	4.16	5.93	2.77	1.63	39.00
1882	1.51	1.06	2.93	2.93	4.96	6.23	3.94	6.56	0.92	3.19	1.56	1.71	37.50
1883	1.87	2.75	0.51	4.14	4.31	3.54	4.19	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1893	0.95	1.65	2.88	5.73	2.45	1.37	1.08	0.69	3.57	0.46	2.25	1.54	24.62
1894	1.64	0.88	2.53	1.71	2.18	4.14	0.99	1.78	5.17	1.16	1.62	0.62	24.42
1895	1.33	0.19	0.35	1.03	2.53	1.57	5.58	2.74	5.17	0.87	2.18	4.20	27.74
1896	1.17	0.80	0.79	4.24	5.25	3.10	9.45	3.69	6.68	1.30	1.42	0.30	38.19
1897	4.91	1.23	4.64	2.61	1.06	0.92	3.60	1.01	2.46	0.23	2.00	1.08	25.75
1898	3.38	1.43	5.43	2.77	8.74	9.86	0.96	7.13	3.84	2.73	2.19	0.61	49.07
1899	0.24	1.39	2.70	1.44	6.07	2.57	2.82	2.40	2.46	4.34	1.23	1.71	29.37
1900	1.71	2.49	2.95	1.35	4.28	0.51	3.69	8.21	4.65	2.61	1.63	0.16	34.24
1901	1.13	1.77	2.70	0.95	1.51	3.70	4.59	1.38	2.84	1.17	1.08	1.09	23.91
1902	0.44	1.29	4.17	2.07	5.01	8.96	10.54	3.78	6.04	3.28	1.82	1.64	49.04
1903	0.74	1.95	2.72	4.07	5.42	3.64	5.77	4.91	5.30	1.88	1.08	0.92	38.40
1904	2.18	0.89	3.66	2.60	3.05	2.49	8.83	5.97	5.49	0.24	0.23	1.96	37.59
1905	0.67	1.64	2.34	4.78	3.96	5.16	2.16	2.58	1.47	2.85	1.87	1.56	31.04
1906	3.01	2.19	2.24	1.92	2.33	3.49	2.10	2.50	4.02	0.69	2.09	1.78	28.36
1907	3.24	0.20	1.27	3.16	2.83	2.44	5.23	6.41	2.69	0.65	1.43	1.11	30.66
1908	1.83	3.01	4.65	3.50	9.32	3.84	2.68	3.91	1.57	1.42	3.61	0.48	39.85
Means	1.80	1.56	2.57	2.97	4.08	3.98	3.77	3.52	3.50	1.88	1.73	1.47	32.83

Values 1864 to 1883, inclusive, for Elmira, 12 miles distant.

Section 64—Precipitation in Northern Illinois.

Henry, Marshall County, Ill.—Elevation, 500 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1871	2 59	2 49	3.20	1 60	1.80	4.70	1 80	3.70	0.50	2.20	2.90	1.90	29.38
1872	.....	0.40	0.55	4.10	3.50	5.30	3.30	6.30	5.30	1.50	1.20	0.70	.....
1873	2.52	0.80	0.90	4.50	4.50	0.90	2.20	2.00	2.50	1.80	1.40	4.65	28.67
1874	3.40	1.58	1.20	2.50	3.20	3.30	1.50	1.40	3.20	1.90	3.20	0.50	26.88
1875	0.40	1.90	1.35	2.30	3.70	3.50	8.30	2.10	5.10	1.90	0.67	2.70	33.92
1876	3.40	2.60	2.90	4.00	3.40	5.60	6.10	1.20	2.50	1.20	3.60	0.76	37.26
1877	0.60	.....	2.60	3.70	2.40	5.90	3.10	1.00	0.90	6.10	4.00	2.90	.....
1878	0.50	1.80	2.30	5.40	6.10	3.10	1.10	5.60	0.90	2.90	0.40	1.80	31.90
1879	0.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1887	2.24	4.55	0.72	0.73	1.52	1.70	1.30	4.80	2.70	2.96	1.48	3.53	28.23
1888	1.07	1.57	2.54	0.93	6.87	2.29	2.14	1.25	1.21	2.71	3.10	2.22	27.90
1889	1.65	0.85	1.60	2.60	4.12	5.72	4.97	0.75	3.83	2.02	1.86	1.45	31.42
1890	2.05	2.03	2.55	3.39	4.54	3.98	0.66	1.45	3.07	5.57	1.45	0.20	30.94
1891	2.36	1.35	3.13	3.50	2.68	6.79	1.99	4.45	0.98	1.43	4.66	2.28	35.60
1892	1.20	0.60	2.63	3.33	12.57	10.01	4.22	0.32	1.25	0.70	2.65	2.30	41.78
1893	1.70	0.90	.....	5.10	1.60	2.95	1.25	0.38	1.91	0.95	.....	.....	.....
1894	.....	.....	.....	.....	3.20	4.91	0.25	1.82	7.06	1.29	.....	1.11	.....
1895	1.00	0.20	0.86	1.56	1.53	1.39	9.66	2.42	1.46	1.24	4.31	5.16	30.79
1896	0.92	0.97	0.93	4.45	7.05	2.81	9.65	2.13	6.95	0.08	2.75	0.12	38.81
1897	5.47	1.65	3.79	2.36	0.95	7.35	2.92	0.71	0.95	0.18	4.33	1.03	31.69
1898	4.00	*2.10	*6.15	3.68	6.41	3.61	1.10	7.10	6.91	3.11	2.46	1.32	47.95
1899	0.33	1.94	2.26	1.06	5.64	3.00	4.57	1.63	3.12	3.45	1.97	2.48	31.45
1900	1 82	3.67	3.15	1 68	4 76	2.52	2.76	6.79	3.64	3.94	2.25	0.14	37.12
1901	1 15	1 23	3 97	0.96	2.20	2.83	3.40	1.90	2.56	0.83	1.50	1 76	24.59
1902	0 46	1 60	3 60	2.63	4 14	11.21	11.01	5.44	6.10	1.60	3.38	1.88	53.05
1903	1 20	2 59	3.84	5.22	3.86	2.67	3.28	5.50	6.68	1.35	1.69	1.86	39.73
1904	2 84	1.43	4.28	3.51	3.85	3.22	5.73	4.51	3.66	0.31	T	1.71	35.05
1905	1.09	1.76	2.64	3 87	3.60	5.46	2.51	4.20	1.86	2.91	2.21	1.63	33.74
1906	2 23	1.70	2 31	1.65	2.53	3.31	2.57	3.91	5.03	1.92	2.56	2.17	31.89
1907	5 85	0.16	3.20	2.79	3.65	3.79	5.43	4.58	4.51	0 80	1.92	1.23	37.91
1908	1 12	2 51	3.00	4 64	8.90	4.60	2.82	0.94	0.80	0.77	1.87	0.81	32.78
Means	1 94	1.68	2.58	3 03	4.19	4 28	3.72	3.01	3.24	1.99	2.35	1.80	33.81

Values from 1871 to 1893 inclusive, for Hennepin, 10 miles distant.
Values from May 1894 to January 1898, inclusive, for Clear Creek less than 17 miles distant.
* Estimated.

Section 64—Precipitation in Northern Illinois.

Joliet, Will County, Ill.—Elevation, 541 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1887	.....	.....	.....	.....	0.97	2.07	2.47	2.72	2.96	2.95	1.85	3.17	.....
1888	0.90	1.00	2.35	2.10	8.50	1.70	0.70	6.00	0.90	3.30	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.87	1.57	.....
1894	1.16	1.31	2.87	2.23	3.69	2.84	0.46	0.85	5.99	1.18	1.68	1.00	25.26
1895	1.82	0.67	1.04	1.92	1.95	1.26	4.32	2.96	0.93	0.67	2.90	6.62	27.06
1896	1.14	2.07	1.15	2.82	5.28	3.89	4.97	2.75	6.69	0.86	2.96	0.36	34.94
1897	6.67	1.84	3.80	2.87	1.25	5.19	1.59	0.55	0.63	0.44	4.42	1.68	30.93
1898	4.05	2.28	6.12	1.42	3.82	7.89	1.59	4.69	3.20	4.53	2.61	2.15	44.35
1899	0.82	1.68	2.23	0.35	4.69	2.17	5.26	1.74	2.44	2.39	1.15	1.70	26.62
1900	1.58	4.29	2.24	0.79	4.27	1.80	5.08	5.74	2.05	1.61	3.10	0.53	33.08
1901	1.88	1.62	3.62	0.56	0.81	3.14	5.42	2.84	2.55	0.85	1.63	2.36	27.28
1902	0.55	1.43	5.51	2.36	7.48	12.86	9.38	3.15	6.28	2.44	2.99	1.68	56.11
1903	1.05	2.92	2.22	3.62	2.49	1.68	4.46	4.77	4.98	1.40	0.86	2.18	32.63
1904	2.42	1.75	4.97	3.81	3.19	0.94	2.97	3.19	4.95	1.44	0.10	1.63	31.36
1905	1.18	1.43	2.29	4.13	5.42	5.10	4.18	4.29	3.63	3.57	2.66	1.46	39.34
1906	2.23	2.30	1.61	1.67	2.00	1.85	2.51	4.00	5.68	2.76	2.63	3.13	38.37
1907	5.70	0.32	3.00	2.28	3.32	1.70	5.38	4.66	6.13	0.66	1.86	3.07	38.08
1908	0.77	2.66	4.33	3.32	6.95	1.30	3.79	3.80	1.32	0.82	2.77	1.30	33.13
Means	2.12	1.85	3.08	2.27	3.89	3.38	3.79	3.45	3.61	1.87	2.24	2.09	33.64

From November 1893 to April 1895, inclusive, the values are for Braidwood, 19 miles distant.

Section 64—Precipitation in Northern Illinois.

Kishwaukee, Winnebago County, Ill.—Elevation, 730 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1872	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.76	.....
1873	1.80	.....	1.56	1.50	4.75	3.00	1.60	1.65	1.55	2.70	1.60	2.25	.....
1874	4.87	0.83	1.01	1.23	1.09	3.39	0.90	1.19	5.97	1.10	1.73	0.57	23.90
1875	0.75	1.56	0.59	3.06	2.25	6.21	5.96	2.15	3.56	2.34	0.51	2.57	31.51
1876	3.46	2.91	2.84	3.83	6.06	4.25	5.80	2.42	4.71	1.50	4.37	0.41	42.56
1877	3.06	0.30	5.53	3.99	2.20	4.32	1.96	4.04	0.61	6.15	3.90	2.00	38.06
1878	0.56	1.52	3.63	3.44	4.20	3.48	5.75	1.99	0.78	6.03	0.78	1.48	33.64
1879	0.71	1.32	0.91	2.76	2.19	3.63	6.98	3.06	0.40	1.93	5.35	1.18	30.42
1880	3.17	1.92	2.70	4.53	4.11	3.88	1.74	2.98	3.51	1.20	1.73	0.60	32.07
1881	1.71	6.50	3.49	1.38	2.39	6.44	7.72	0.33	3.72	5.37	2.17	2.99	44.21
1882	1.19	2.01	3.54	5.15	3.42	5.69	2.96	3.82	0.93	3.32	2.24	2.49	36.76
1883	1.98	3.76	0.57	1.96	6.39	4.21	3.69	1.50	0.92	6.66	3.87	1.58	37.09
1884	1.42	1.91	2.88	3.45	3.43	6.16	6.13	3.68	3.85	6.24	1.99	6.51	47.65
1885	2.39	2.50	0.26	4.33	2.39	5.47	4.50	9.18	4.64	3.95	1.96	3.57	45.14
1886	5.88	3.40	4.55	4.36	4.93	2.74	0.35	8.41	2.25	4.03	1.61	1.65	44.16
1887	4.21	6.44	1.25	0.92	1.98	0.89	3.12	4.42	3.75	2.09	1.39	5.01	35.47
1888	1.72	1.30	3.03	2.54	6.25	1.27	4.90	1.99	1.05	1.80	2.39	2.58	30.82
1889	2.96	1.51	1.32	2.88	6.64	3.93	2.02	0.74	1.95	0.67	2.38	2.88	29.88
1890	2.81	2.69	2.42	3.76	5.28	12.33	0.83	3.38	0.60	5.98	2.23	1.60	43.91
1891	2.72	1.65	3.21	4.83	2.75	4.87	2.27	1.44	0.75	1.53	3.67	1.30	30.99
1892	3.72	1.95	1.61	4.71	9.18	14.16	4.32	7.26	1.61	0.78	2.53	2.96	54.79
1893	3.39	2.45	3.21	5.38	3.09	4.51	3.49	1.13	2.82	3.66	1.71	1.71	36.49
1894	1.47	2.06	3.26	*2.74	*3.51	*2.03	*1.48	*1.27	*5.15	*1.81	*1.79	*0.33	26.90
1895	2.27	0.93	2.53	1.51	3.54	1.93	2.53	3.06	2.77	1.32	3.34	2.59	28.32
1896	0.90	2.40	2.02	4.08	6.31	2.34	4.36	3.75	8.33	0.85	3.05	0.90	39.29
1897	4.72	1.45	4.90	3.81	1.12	4.09	2.71	0.90	1.18	0.68	1.73	1.62	28.91
1898	2.97	2.52	4.21	2.16	4.36	2.79	2.32	5.46	3.49	2.74	1.23	0.84	35.09
1899	0.43	0.95	1.74	.....	.....	.....	.....	.....	.....	1.60	1.12	2.23	.....
1900	.....	3.39	1.07	2.90	3.46	2.58	4.04	5.35	2.98	3.64	1.93	0.48	.....
1901	1.41	2.40	3.93	0.46	2.00	3.13	4.39	1.36	3.34	0.82	1.03	1.53	25.80
1902	0.48	1.63	3.17	1.62	7.88	7.45	6.87	1.49	7.04	2.07	2.94	1.87	44.51
1903	0.58	1.19	3.84	6.00	3.73	2.38	5.25	9.29	6.06	2.77	1.25	1.04	43.38
1904	2.90	1.30	4.43	2.84	3.36	1.24	3.15	3.35	3.52	1.89	0.02	1.93	29.93
1905	0.61	1.42	3.80	2.90	5.51	2.65	2.65	3.13	1.95	3.53	2.24	1.45	31.84
1906	2.60	1.64	2.88	1.47	3.07	3.11	2.99	6.91	4.51	1.83	2.56	1.74	35.31
1907	3.58	0.29	2.15	2.34	2.90	4.94	5.07	3.76	5.70	0.74	1.31	1.23	34.01
1908	0.63	2.09	4.17	3.59	7.84	2.31	3.08	2.34	0.94	1.07	2.82	0.56	31.44
Means	2.29	2.12	2.73	3.10	4.10	4.22	3.65	3.38	3.05	2.68	2.18	1.90	35.40

* From April 1894 to December 1894, inclusive, the values are for Winnebago. All other values prior to September 1898 are for Rockford. The three stations are in the same county.

Section 64—Precipitation in Northern Illinois.

LaGrange, Cook County, Ill.—Elevation, 657 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1892	.....	0.83	2.20	2.76	8.00	12.25	.....	.....	1.70	0.81	2.24	1.93	.....
1893	1.91	1.79	2.15	5.61	2.27	5.30	2.96	0.23	2.84	0.52	2.26	2.00	29.84
1894	1.64	1.72	.....	.....	3.16	2.09	.....	.....	8.87	1.04	1.45	0.71	.....
1895	1.64	0.45	0.85	1.17	2.24	2.00	.....	5.69	1.10	0.77	5.09	6.04	.....
1896	1.16	2.39	1.04	4.21	4.73	2.63	.....	.....	5.39	0.85	3.03	0.10	.....
1897	6.09	1.83	4.00	3.50	1.85	3.74	2.97	1.57	0.80	0.33	3.82	1.36	31.86
1898	4.30	2.60	5.87	1.14	3.50	6.92	2.77	4.59	3.97	4.21	2.69	1.56	44.12
1899	0.37	1.91	2.06	0.35	5.98	1.86	8.80	2.18	1.73	2.54	1.53	1.63	30.94
1900	1.30	3.38	1.84	0.95	3.78	3.40	5.64	4.81	1.95	1.12	3.32	0.32	31.81
1901	1.45	2.03	3.78	0.47	0.96	4.38	2.87	2.00	3.56	1.65	1.04	1.33	25.52
1902	0.53	1.34	3.19	1.89	6.16	10.64	7.51	2.08	5.91	2.09	2.68	2.31	46.33
1903	0.86	2.90	2.51	3.51	1.27	2.06	.....	.....	5.54	1.50	0.37	2.08	.....
1904	1.65	1.56	5.30	2.02	1.57	0.79	3.55	3.06	3.69	1.59	T	0.99	25.77
1905	0.72	1.06	1.58	3.41	5.91	3.33	3.56	2.65	4.25	1.65	2.77	0.46	31.35
1906	1.61	2.50	2.56	1.59	3.42	2.49	2.16	5.53	6.19	2.72	2.69	2.36	35.82
1907	5.17	0.40	2.71	2.45	2.61	3.99	4.54	4.28	5.72	1.05	1.15	1.81	35.88
1908	1.41	3.40	3.20	2.71	6.16	1.30	3.54	7.73	1.40	0.89	2.40	1.34	35.50
Means	1.99	1.89	2.80	2.36	3.74	4.07	4.24	3.57	3.80	1.49	2.27	1.67	33.89

Section 61—Precipitation in Northern Illinois.

Lanark, Carroll County, Ill.—Elevation, 883 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1887	.....	.....	.....	.....	1.89	1.89	3.81	3.68	1.76	2.31	1.61	3.63	.....
1888	1.39	1.26	4.04	1.52	6.46	2.72	4.96	2.91	1.24	2.40	3.13	3.02	35.05
1889	1.66	1.17	1.49	3.87	3.55	3.17	6.42	0.38	4.71	1.02	1.10	2.63	31.17
1890	2.76	1.61	2.13	.....	3.71	12.32	0.78	2.96	1.36	5.13	1.87	0.81	.....
1891	1.59	1.18	2.86	3.20	3.22	3.18	1.39	2.63	1.84	1.58	3.71	2.06	31.74
1892	2.13	1.83	2.97	6.05	9.29	9.57	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	*3.00	*0.33	*3.19	*6.49	*3.68	*1.60	*0.63	.....
1895	*1.82	*0.29	*0.70	*0.18	3.78	1.60	4.28	1.61	1.70	0.80	2.02	1.11	20.25
1896	0.49	1.02	1.21	5.05	7.92	2.92	5.06	3.23	4.78	1.97	0.83	0.95	35.43
1897	2.48	0.89	3.20	2.67	1.24	5.58	1.06	0.59	1.54	0.39	1.79	1.46	22.89
1898	1.85	1.52	2.66	2.76	3.87	2.12	2.00	7.23	3.66	3.45	1.07	0.34	32.53
1899	0.27	0.20	1.31	2.12	7.74	2.72	3.66	1.67	1.33	2.67	1.75	1.73	27.17
1900	1.48	2.35	1.51	2.36	4.23	1.91	6.17	4.16	2.87	2.32	1.88	0.72	32.26
1901	0.90	0.70	2.75	0.66	2.72	1.87	1.15	0.27	2.58	1.39	1.06	1.26	17.31
1902	0.46	1.27	1.41	2.65	7.14	10.51	9.79	2.26	5.63	3.08	4.53	2.78	51.54
1903	1.06	1.90	2.94	1.02	5.05	1.88	9.09	6.26	5.64	2.02	1.06	1.71	42.63
1904	*0.65	*0.60	2.68	3.08	3.37	1.12	2.94	5.03	7.49	1.20	0.17	2.65	30.98
1905	0.57	1.26	3.06	2.41	4.06	3.15	4.01	7.90	2.62	4.29	2.16	0.96	36.45
1906	2.60	1.79	2.14	2.17	4.18	5.24	4.52	6.05	3.70	1.95	3.48	1.71	39.64
1907	2.67	0.22	1.51	2.50	3.23	3.48	3.72	5.13	6.20	1.42	1.11	0.93	33.42
1908	0.62	1.94	3.02	2.91	6.14	5.13	6.67	2.09	0.89	1.16	3.02	0.49	34.68
Means	1.44	1.23	2.31	2.79	4.64	4.10	4.23	3.51	3.55	2.23	1.96	1.59	33.58

* Values are for Zion, in the same county.

Section 64—Precipitation in Northern Illinois.

Morrison, Whiteside County, Ill.—Elevation, 685 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1895	.....	.....	.....	.....	2.36	3.50	8.28	2.75	5.88	.....	.....	.....	.....
1896	.....	.....	1.83	4.91	4.34	3.30	6.55	2.99	5.10	1.00	0.97	0.39	.....
1897	2.91	1.73	3.33	2.88	1.95	5.27	3.05	0.89	2.16	0.43	1.40	1.32	27.32
1898	3.01	1.82	4.42	5.11	4.19	2.98	1.68	5.61	2.68	3.38	1.20	0.54	36.62
1899	0.30	1.87	1.94	2.73	7.51	2.68	2.78	3.18	0.96	3.39	1.29	1.95	30.58
1900	1.31	2.56	3.12	3.95	6.33	1.61	5.35	5.03	4.07	2.75	1.31	0.23	37.62
1901	0.82	0.63	2.92	0.49	2.62	3.82	6.42	0.29	2.19	0.83	1.03	1.36	23.42
1902	0.82	1.62	2.46	1.47	6.48	9.60	8.66	5.32	3.99	2.78	2.91	2.45	48.56
1903	1.04	1.47	2.41	4.45	5.49	2.02	7.40	5.78	6.09	3.57	1.05	1.58	42.35
1904	2.53	1.13	3.86	3.18	3.13	1.13	4.04	5.71	3.19	0.60	0.02	2.81	31.33
1905	0.94	2.89	3.13	3.80	6.71	4.03	2.52	3.64	2.81	3.23	1.91	1.48	37.09
1906	2.34	2.24	3.36	3.03	5.27	4.48	4.10	2.91	3.85	1.38	3.17	1.55	37.68
1907	3.98	0.46	1.66	1.74	6.03	5.01	9.19	6.43	5.75	1.44	1.42	1.01	44.12
1908	0.77	3.10	3.47	2.56	6.84	4.33	3.67	3.71	1.01	0.59	2.83	0.50	33.38
Means	1.73	1.79	2.91	3.10	4.95	3.84	5.26	3.87	3.55	1.95	1.58	1.32	35.85

Values for 1895 are for Tampico, 15 miles distant.
Values from March, 1896 to June, 1901, inclusive, are for Round Grove, 5 miles distant.

Section 64—Precipitation in Northern Illinois.

Ottawa, LaSalle County, Ill.—Elevation, 500 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1856	1.90	0.43	0.14	1.36	6.20	2.11	2.71	1.54	2.38	2.86	3.64	4.82	30.09
1857	0.46	4.45	3.06	1.41	3.65	3.95	3.97	6.10	0.89	2.68	2.96	1.12	34.70
1858	1.65	3.15	2.98	4.55	8.36	6.57	4.82	2.37	3.55	3.97	2.35	2.55	46.87
1859	1.71	0.86	5.24	4.08	3.12	1.68	0.73	3.44	1.66	2.34	2.09	0.94	27.89
1860	2.66	1.59	0.70	1.49	2.20	2.54	2.89	0.79	1.88	0.40	4.03	5.90	27.07
1861	1.22	1.95	2.54	4.97	3.60	4.64	5.23	2.41	5.17	3.57	1.44	2.15	38.89
1862	5.80	1.29	4.16	4.85	3.61	5.61	8.92	6.82	7.55	2.49	2.48	2.13	55.71
1863	.....	3.29	3.26	3.26	3.64	.....	.....	3.11	2.74	4.23	1.78	1.40	.....
1864	2.43	1.64	2.70	3.64	1.79	1.52	2.94	1.85	2.58	1.66	3.29	3.49	29.53
1865	0.45	3.99	3.15	5.48	.....	5.17	5.01	5.50	3.89	1.84	0.49	0.59	.....
1866	2.85	2.49	1.97	1.62	2.16	1.57	5.73	3.62	4.72	2.16	0.90	2.97	32.76
1867	1.28	4.55	1.42	1.72	4.64	3.73	4.23	2.41	0.11	0.92	.....	1.66	.....
1868	1.07	1.40	5.28	2.60	7.64	2.21	1.96	3.19	3.48	.....	.....	.....	.....
1869	.....	1.95	1.38	4.58	7.45	6.27	4.10	4.24	.....	1.48	1.88	1.63	.....
1870	5.28	0.99	3.68	0.85	1.15	1.39	1.90	2.26	3.63	4.33	1.42	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.60	0.60	0.43	.....
1887	1.82	3.25	0.64	0.39	1.08	1.12	1.17	3.06	2.77	2.80	2.17	3.33	23.60
1888	1.80	1.88	3.70	1.23	5.39	2.01	3.58	1.77	0.60	2.71	3.38	2.22	30.27
1889	1.91	1.16	1.77	2.44	4.36	4.61	5.67	2.00	3.92	1.51	3.12	1.80	34.27
1890	1.91	1.40	3.33	1.87	3.99	6.87	0.34	2.72	2.48	3.89	2.06	0.27	31.16
1891	2.86	2.28	2.56	3.96	1.81	3.99	4.45	5.11	1.27	0.56	4.75	1.74	35.37
1892	1.45	1.52	2.70	3.56	13.25	9.80	4.92	0.81	2.56	0.63	2.48	1.84	45.52
1893	2.20	3.03	3.30	5.23	1.95	2.49	1.02	0.77	2.29	1.10	2.18	2.16	27.72
1894	2.38	1.58	2.57	1.51	1.01	3.03	0.80	1.75	7.18	1.63	2.09	1.19	29.72
1895	1.22	0.70	0.82	2.02	1.06	1.02	4.79	2.26	1.47	1.16	5.27	5.77	27.56
1896	1.37	1.65	1.32	3.38	4.24	2.22	8.63	2.43	9.38	0.17	3.43	0.28	38.50
1897	5.98	1.71	4.47	1.88	0.99	6.90	2.99	0.74	1.89	0.46	4.37	1.74	34.12
1898	5.24	2.38	5.21	3.12	6.72	5.80	1.30	4.31	5.90	4.73	2.88	1.42	49.01
1899	0.63	2.10	3.21	1.50	5.08	1.42	5.70	3.02	2.15	2.53	1.46	2.03	30.83
1900	1.60	4.53	2.91	1.53	5.60	1.96	4.53	7.21	2.26	2.24	3.16	0.34	37.87
1901	1.76	2.10	3.51	0.61	2.45	2.67	5.17	0.81	3.20	0.91	1.49	2.09	26.77
1902	0.63	1.41	1.89	2.55	5.61	10.51	10.49	4.40	6.76	1.87	4.29	2.01	55.15
1903	1.13	2.35	3.10	5.08	4.19	3.78	1.94	4.90	6.03	1.13	0.46	1.91	36.30
1904	2.54	1.80	1.87	3.93	3.00	1.89	5.14	3.58	3.27	0.26	0.08	1.86	32.22
1905	1.30	1.93	2.09	5.15	3.68	3.39	1.69	4.12	2.13	1.87	2.01	1.70	31.05
1906	2.07	2.26	2.02	1.63	2.37	2.64	1.45	4.57	5.09	1.23	2.63	1.22	29.18
1907	5.25	0.15	2.55	2.69	4.84	2.50	6.92	4.49	4.94	1.00	1.96	1.79	39.08
1908	0.86	1.53	3.87	3.48	8.47	1.77	3.05	2.03	0.35	0.65	1.79	0.99	28.54
Means	2.19	2.07	2.89	2.81	4.24	3.65	3.93	3.15	3.39	1.97	2.41	1.98	34.71

Section 64—Precipitation in Northern Illinois.

Streator, LaSalle County, Ill.—Elevation, 616 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1893	.....	.....	.....	6.17	3.21	0.96	.....	.....	3.00	.....	2.80	0.97	.....
1894	1.90	0.44	2.95	1.03	3.62	2.53	.....	.....	.....	.....	.....	2.10	.....
1895	1.55	0.30	1.40	0.41	0.80	.....	6.00	2.60	1.90	1.00	4.54	5.89	.....
1896	1.30	1.15	0.65	2.63	5.98	3.27	5.75	1.52	3.44	0.05	2.07	0.10	27.91
1897	5.65	1.55	4.08	1.88	1.13	6.70	2.71	1.07	1.10	0.23	4.20	1.32	31.62
1898	3.43	1.62	6.93	3.00	6.00	3.24	0.62	2.96	4.20	2.99	2.47	0.77	38.23
1899	1.28	1.82	*2.00	0.45	2.50	1.82	5.22	1.69	2.73	2.47	1.23	1.93	25.14
1900	1.49	3.54	2.85	1.24	2.44	1.63	3.13	7.13	2.56	2.18	2.57	0.34	31.10
1901	1.42	1.40	3.49	0.75	1.24	2.85	3.02	2.56	2.20	0.63	1.38	2.15	23.09
1902	0.79	1.32	4.66	2.17	4.37	10.64	8.59	7.11	5.26	3.24	3.48	1.74	53.37
1903	0.90	2.52	3.79	4.81	2.48	2.07	2.43	4.04	7.60	1.02	0.78	1.78	34.22
1904	2.23	1.55	5.76	3.91	4.46	2.11	4.60	2.39	4.15	0.20	T	1.57	32.93
1905	1.07	1.38	2.20	4.22	4.77	3.01	4.10	2.15	2.39	2.64	1.73	1.41	31.07
1906	2.26	1.99	2.77	1.40	1.79	3.10	1.39	2.25	4.25	1.64	2.75	3.06	28.65
1907	5.64	0.10	3.02	2.92	3.70	3.95	7.61	5.08	5.58	0.51	2.06	1.41	41.58
1908	0.59	3.73	2.53	4.15	7.16	1.69	3.62	0.41	0.39	0.68	2.36	0.92	28.23
Means	2.10	1.63	3.27	2.57	3.48	3.30	4.20	3.07	3.38	1.39	2.29	1.72	32.40

* Estimated.

Section 64—Precipitation in Northern Illinois.

Sycamore, DeKalb County, Ill.—Elevation, 855 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1881	.....	.....	.....	.....	3.50	11.40	7.05	0.80	5.10	8.20	3.60	3.75	.....
1882	1.31	1.90	4.85	6.10	3.80	7.90	4.35	2.34	1.94	4.55	2.25	2.25	43.54
1883	2.15	4.95	0.65	3.41	8.55	5.85	5.50	1.95	2.93	6.48	6.63	1.86	50.91
1884	0.71	2.15	2.02	4.06	3.48	4.63	8.84	3.43	3.46	5.76	2.48	4.14	44.86
1885	2.66	1.55	0.55	4.31	1.65	7.04	4.98	9.90	6.10	4.65	2.06	3.05	48.50
1886	4.10	1.85	3.85	5.14	4.24	2.27	0.67	4.29	3.23	2.26	0.96	1.54	34.40
1887	3.93	4.50	0.89	1.08	0.95	1.12	3.12	3.61	3.27	2.80	1.49	3.02	29.78
1888	1.01	1.16	2.59	2.05	5.50	1.27	3.10	4.03	1.09	2.37	1.80	2.16	28.13
1889	1.13	1.16	1.39	3.47	5.17	1.50	4.48	0.86	1.93	0.85	1.80	1.52	25.26
1890	1.64	1.15	1.57	2.58	3.87	7.98	0.42	2.07	1.22	3.48	1.87	1.50	29.35
1891	1.91	1.60	1.95	4.50	2.79	3.55	2.00	2.22	0.37	0.89	4.21	2.37	28.36
1892	1.73	1.21	2.01	4.81	11.77	11.23	2.56	3.56	1.62	0.95	2.13	2.06	45.64
1893	1.83	2.12	2.22	4.59	3.25	5.04	3.65	0.46	3.83	1.13	2.74	2.19	33.05
1894	2.50	1.35	3.26	2.87	3.90	1.79	0.78	0.95	7.88	1.77	1.96	0.74	29.75
1895	1.35	0.30	1.03	1.24	2.52	2.20	3.10	3.06	0.75	0.55	3.71	3.38	23.19
1896	0.50	2.03	1.44	2.74	3.80	1.59	3.60	0.58	8.39	0.26	1.88	0.55	27.36
1897	4.64	1.31	4.31	3.78	1.10	6.04	3.03	1.06	0.44	0.38	3.38	0.81	30.28
1898	3.28	3.57	5.42	1.65	3.20	3.47	1.22	6.47	3.71	4.81	1.76	0.80	39.36
1899	0.37	1.59	2.14	0.96	3.32	1.19	4.04	1.39	1.73	2.44	1.33	1.41	21.91
1900	1.63	3.00	1.96	1.15	2.83	2.22	5.60	11.17	2.79	2.27	2.23	0.53	37.38
1901	1.27	1.19	3.86	0.44	1.63	1.88	4.51	1.06	2.18	0.71	1.32	1.30	21.35
1902	0.70	2.72	3.27	1.96	7.97	9.00	7.83	2.27	4.29	3.10	2.95	2.02	48.08
1903	1.83	1.87	3.10	4.76	3.16	2.70	7.14	5.14	6.88	2.57	0.97	2.38	42.50
1904	1.31	1.52	4.66	2.91	3.51	2.57	4.04	6.49	5.24	0.84	0.03	2.16	35.28
1905	0.50	1.45	2.98	3.14	6.59	4.30	3.20	6.52	1.06	4.61	2.20	1.66	38.21
1906	2.99	3.03	3.06	1.80	4.40	3.17	1.36	3.34	6.09	2.02	3.40	1.84	36.50
1907	3.88	0.30	1.49	2.66	4.59	4.57	4.99	3.28	7.39	1.26	1.42	1.17	37.00
1908	0.79	2.93	3.31	4.60	7.01	4.12	3.06	3.46	1.00	0.86	2.05	1.50	34.69
Means	1.91	1.98	2.59	3.07	4.21	4.34	3.86	3.42	3.43	2.60	2.31	1.92	35.64

Section 64—Precipitation in Northern Illinois.

Tiskilwa, Bureau County, Ill.—Elevation, 798 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1864.....	.....	.....	.....	.....	.....	.....	.....	1.75	3.16	3.16	2.98	3.89	.....
1865.....	0.26	3.40	3.12	6.14	1.57	4.47	6.96	8.79	11.57	2.90	0.28	0.54	50.00
1866.....	1.92	2.02	2.38	1.90	1.90	2.80	4.19	5.44	6.79	1.66	0.26	3.06	34.32
1867.....	1.76	1.27	2.06	2.00	6.62	3.30	1.95	2.48	1.36	0.97	2.40	1.50	27.67
1868.....	0.48	0.97	5.15	.....	.....	2.41	2.03	2.08	4.61	1.24	3.57	1.21	.....
1869.....	1.95	2.47	1.14	3.40	7.78	9.96	6.86	9.37	0.67	0.81	3.88	3.02	51.31
1870.....	4.15	0.70	5.50	0.60	1.42	0.70	1.91	.....	6.64	3.62	1.84	1.52	.....
1871.....	3.32	2.00	2.72	2.83	2.35	5.90	1.85	.....	.....	.....	3.45	3.47	.....
1872.....	0.18	0.75	2.96	5.91	6.56	6.31	4.05	9.21	6.33	0.92	1.59	1.28	46.05
1873.....	4.55	1.06	1.39	6.75	7.25	2.65	5.65	1.32	1.83	2.23	1.40	3.87	39.95
1874.....	3.05	1.29	1.81	3.27	3.48	4.56	1.78	3.56	5.14	3.40	2.94	0.74	35.02
1875.....	1.10	2.34	2.38	3.40	4.65	6.18	9.60	2.30	8.53	4.15	0.83	2.60	48.06
*.....	*	*	*	*	*	*	*	*	*	*	*	*	*
1895.....	.....	.....	.....	.....	2.70	0.70	7.89	2.38	4.44	0.78	3.31	3.89	.....
1896.....	1.16	1.59	1.01	4.28	4.71	2.81	5.57	2.50	6.70	0.76	1.78	0.17	33.04
1897.....	5.81	1.27	4.55	2.77	1.42	3.34	2.38	1.48	2.62	0.36	3.36	1.24	30.60
1898.....	3.76	2.43	6.17	3.50	7.30	2.85	1.17	6.97	4.58	2.63	2.93	1.09	45.38
1899.....	0.38	1.81	2.83	1.03	5.25	3.89	3.48	1.65	2.55	3.73	1.15	1.63	29.38
1900.....	1.88	3.85	3.52	1.72	4.23	1.52	2.40	7.76	4.67	2.89	2.03	0.22	36.69
1901.....	1.36	1.83	3.53	0.80	2.63	2.15	5.12	2.02	2.10	0.70	1.54	1.41	25.19
1902.....	0.55	1.46	3.29	2.33	5.05	8.19	10.70	5.00	6.25	2.99	3.75	2.12	51.68
1903.....	0.99	2.95	2.71	5.07	3.72	2.82	2.24	4.26	7.19	2.43	1.27	1.20	36.85
1904.....	2.53	1.17	3.78	3.32	3.29	1.99	6.78	5.37	3.40	0.28	0.10	1.90	33.91
1905.....	0.84	1.35	2.73	4.59	5.10	5.72	1.82	2.54	2.51	2.14	2.03	1.60	32.97
1906.....	2.39	2.28	3.71	2.42	2.96	3.70	2.14	4.38	6.25	1.60	2.97	2.10	36.90
1907.....	4.47	0.33	2.21	2.83	5.65	3.34	10.17	5.39	3.69	0.66	1.59	1.36	41.69
1908.....	1.22	3.65	3.62	3.01	9.98	3.80	1.89	1.71	1.14	0.90	2.62	0.83	34.37
Means.....	2.09	1.84	3.09	3.27	4.48	3.84	4.42	1.15	4.59	1.92	2.15	1.83	37.67

Values from 1861 to 1875, inclusive, for Wyanet, 6 miles from Tiskilwa.

Section 64—Precipitation in Northern Illinois.

Walnut, Bureau County, Ill.—Elevation, 717 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.	Annual.
1892.....	2.30	1.48	3.09	4.06	8.49	7.84	5.41	0.96	3.42	1.06	1.73	1.94	41.69
1893.....	1.55	1.78	3.13	5.02	1.65	4.51	0.86	0.48	3.38	0.23	2.11	2.05	26.78
1894.....	2.11	2.10	2.98	1.23	3.57	3.09	0.26	1.35	6.89	1.13	1.52	0.61	27.05
1895.....	1.92	0.55	0.86	1.02	2.39	0.92	5.41	3.23	2.71	0.61	2.60	3.55	25.80
1896.....	0.87	1.57	1.51	5.17	4.12	3.81	6.32	2.63	5.94	1.20	2.06	0.17	35.37
1897.....	5.01	1.15	5.05	3.71	1.25	1.91	1.35	1.33	3.43	0.25	2.27	1.21	31.35
1898.....	3.96	2.08	5.22	2.78	5.22	3.98	1.20	5.51	1.47	2.63	1.70	0.96	39.71
1899.....	0.36	1.57	1.89	1.82	6.68	1.69	5.05	2.95	1.91	2.78	0.81	1.57	29.21
1900.....	1.50	2.78	3.17	1.45	3.88	3.03	6.12	6.60	4.74	3.48	1.61	0.29	38.58
1901.....	1.03	1.25	2.57	0.51	2.43	1.16	3.53	1.58	2.06	0.82	1.37	1.25	22.56
1902.....	0.38	1.38	2.09	1.53	6.50	8.89	11.01	4.63	3.99	3.63	1.89	1.81	48.73
1903.....	1.57	1.88	2.65	1.48	4.59	1.96	5.38	4.53	6.69	2.98	0.53	1.32	38.46
1904.....	2.22	1.55	2.89	1.69	3.41	1.38	5.34	4.53	3.96	0.37	0.06	2.18	29.48
1905.....	0.74	1.86	3.63	3.85	5.01	5.20	2.19	4.88	2.77	3.02	1.18	1.42	35.78
1906.....	2.92	2.87	5.22	2.07	4.17	3.94	1.68	3.07	4.02	1.22	2.79	2.52	36.49
1907.....	3.97	0.25	2.23	2.57	4.13	3.44	9.53	1.67	1.84	0.51	1.44	0.92	38.47
1908.....	0.85	3.82	3.34	2.74	9.89	2.90	2.85	1.91	1.26	0.58	2.31	0.66	36.14
Means.....	1.96	1.78	3.03	2.68	4.55	3.86	4.32	3.40	3.07	1.58	1.61	1.41	34.18

Section 61—Precipitation in Northern Illinois.

Winnebago. Winnebago County, Ill.—Elevation, 900 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1857	.....	.....	3.26	2.39	3.64	8.34	4.01	6.10	2.56	4.76	1.91	1.30	.....
1858	2.37	1.29	2.08	3.98	6.87	7.45	3.36	2.85	5.59	2.94	4.50	1.88	45.16
1859	1.28	1.36	4.88	3.44	2.82	2.42	1.89	1.34	2.57	0.68	3.04	0.79	26.51
1860	1.14	2.00	0.78	1.19	4.28	4.47	.....	2.26	5.48	2.17	2.44	3.30	.....
1861	2.66	4.87	2.41	4.98	5.39	1.33	5.78	3.05	6.89	3.56	1.75	1.84	44.51
1862	3.78	1.02	2.16	5.59	3.67	3.09	.....	6.98	5.96	2.76	0.93	1.52	.....
1863	2.86	.....	1.65	.....	5.05	1.67	2.10	2.24	1.63	3.49	2.22	3.62	.....
1864	2.05	0.30	2.71	2.66	1.46	1.13	5.83	1.88	3.57	2.28	2.27	2.76	28.90
1865	0.27	3.25	3.58	4.33	1.56	4.66	6.17	7.22	9.09	3.53	0.42	0.74	44.82
1866	2.49	0.98	2.00	3.06	1.90	4.45	5.03	7.52	4.19	2.86	0.59	3.84	38.91
1867	2.86	2.83	1.58	1.43	4.65	3.74	1.58	3.33	1.53	0.50	1.68	1.03	26.74
1868	0.82	0.77	4.98	4.43	3.82	5.12	2.93	1.60	5.23	1.00	3.31	1.30	35.31
1869	1.39	2.14	0.95	2.76	5.53	7.01	2.91	4.22	3.85	0.83	2.76	2.86	37.21
1870	2.87	0.75	3.41	1.32	1.25	2.12	3.74	3.66	3.92	2.75	0.60	0.78	27.17
*	*	*	*	*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1888	*1.72	*1.30	*3.03	2.20	5.69	1.13	7.63	2.27	1.18	1.75	2.17	2.65	32.72
1889	2.18	2.00	1.40	4.14	5.42	3.20	2.77	0.10	1.66	0.62	1.73	2.83	28.05
1890	3.39	2.73	1.64	3.50	4.35	10.15	0.40	2.55	0.50	6.40	2.10	1.40	39.11
1891	2.30	1.55	4.25	4.17	2.50	3.45	2.13	1.24	0.99	1.49	3.71	2.26	30.04
1892	2.60	1.76	1.95	4.40	8.33	10.29	3.85	5.15	1.74	0.50	2.12	2.38	45.07
1893	2.04	2.04	2.30	4.66	2.72	3.26	2.61	0.80	2.68	2.45	1.67	1.29	28.52
1894	1.48	1.25	3.55	2.74	3.51	2.03	1.48	1.27	5.15	1.81	1.79	0.33	26.39
1895	1.42	0.39	1.90	0.70	4.07	1.89	3.89	2.92	2.29	0.80	3.07	2.07	25.41
1896	0.65	1.54	1.28	3.63	6.50	2.94	4.95	1.92	5.61	0.75	2.18	0.58	32.53
1897	3.74	1.38	4.87	3.63	1.31	4.70	3.82	1.37	1.01	0.58	1.28	1.58	29.27
1898	2.95	3.07	3.95	3.39	3.52	3.65	2.74	7.13	2.47	3.80	1.81	0.71	39.19
1899	0.53	1.49	1.87	2.14	6.56	2.15	6.18	2.57	1.68	2.22	1.52	1.98	30.89
1900	2.20	3.22	2.07	2.98	4.96	2.67	5.81	5.88	3.58	3.70	2.10	0.57	39.74
1901	1.10	1.47	3.52	0.43	2.79	2.83	3.76	1.21	3.15	0.92	1.20	2.05	24.43
1902	0.63	1.43	2.86	1.74	7.62	8.76	5.85	1.53	4.71	1.62	3.06	2.10	41.91
1903	0.58	1.81	3.51	4.91	3.73	2.75	4.93	7.66	5.49	4.35	1.15	1.68	42.55
1904	1.74	1.38	4.55	3.41	3.17	1.53	3.41	2.95	4.11	1.95	0.13	3.34	31.67
1905	0.66	1.69	3.77	3.59	6.38	3.76	3.67	3.83	0.77	4.10	2.29	1.48	35.99
1906	3.72	2.17	3.24	2.09	4.05	4.93	2.83	6.02	4.68	2.56	2.85	1.59	40.73
1907	3.68	0.76	1.49	3.46	3.20	5.81	6.65	4.09	6.45	0.71	1.45	1.77	39.52
1908	1.00	2.57	5.41	4.48	8.17	3.51	4.59	2.85	1.15	1.02	3.66	0.85	39.26
Means	1.98	1.77	2.82	3.18	4.30	4.07	3.92	3.42	3.52	2.23	2.04	1.80	35.05

* Values are for Rockford, in the same county.

Section 64—Northern Illinois.

Average Number of Days with .01 Inch or More of Precipitation.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Aledo	8	7	5	9	8	11	10	10	10	7	5	7	6	95
Antioch	7	4	4	5	5	8	6	7	6	6	3	4	4	62
Ashton	14	9	9	11	8	12	9	9	8	8	6	8	9	106
Aurora	21	8	7	10	8	11	10	7	7	7	6	8	8	97
Cambridge	14	5	6	8	7	9	7	8	7	6	5	5	5	78
Chicago	38	11	11	12	11	12	11	10	9	9	9	10	11	126
Davenport, Iowa	37	9	9	10	9	12	12	9	9	9	8	8	9	113
Dixon	17	9	7	9	10	13	9	9	9	9	6	7	7	104
Dubuque, Iowa	35	9	9	10	10	13	11	10	9	10	8	8	9	116
Galva	16	8	7	9	10	12	10	9	9	9	7	8	7	105
Henry	19	6	5	8	8	11	8	7	7	7	5	7	5	84
Joliet	16	8	8	10	9	11	9	8	8	8	6	7	8	100
Kishwaukee	15	7	7	9	9	12	9	9	8	8	6	7	7	98
LaGrange	16	6	6	8	7	9	7	8	6	7	5	6	5	80
Lanark	20	6	6	8	8	13	9	9	7	8	6	6	5	91
LaSalle	4	10	6	12	11	12	10	12	11	8	6	7	7	112
Morrison	13	8	7	9	9	13	8	9	9	8	6	6	6	98
Ottawa	19	9	8	11	9	12	10	8	8	9	6	8	8	106
Streator	15	6	5	8	9	11	9	8	8	8	6	7	5	90
Sycamore	16	7	7	9	8	11	8	8	7	6	6	7	7	91
Tiskilwa	14	8	8	12	10	12	9	9	9	8	6	8	7	106
Walnut	16	8	7	10	8	12	9	9	8	8	6	7	6	98
Winnebago	20	7	6	9	8	12	8	8	7	8	6	7	6	92

Section 64—Northern Illinois.

Average Snowfall.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Aledo	8	7.3	6.5	3.9	0.2	T	0	0	0	0	0	0.9	3.1	21.9
Antioch	7	6.4	10.5	4.4	0.5	T	0	0	0	0	T	0.5	5.0	27.3
Ashton	14	7.4	11.3	6.9	0.9	T	0	0	0	0	0.2	3.4	6.3	36.4
Aurora	21	7.5	8.8	5.5	0.6	0.1	0	0	0	0	0.1	5.2	5.6	33.4
Cambridge	14	8.6	11.3	6.8	1.6	T	0	0	0	0	0.4	2.5	5.8	37.0
Chicago	24	10.0	11.7	5.2	0.7	0.1	0	0	0	0	T	2.3	6.3	36.3
Davenport, Iowa	24	8.4	8.1	4.8	0.3	T	0	0	0	0	0.1	1.8	4.6	28.1
Dixon	17	8.6	8.7	5.3	0.8	0	0	0	0	0	0.2	2.2	6.0	31.8
Dubuque, Iowa	25	9.4	8.8	7.6	0.8	T	0	0	0	0	0.1	2.2	7.9	36.8
Galva	16	8.4	9.5	5.7	1.4	T	0	0	0	0	0.1	3.3	4.7	33.1
Henry	16	8.2	9.8	6.7	0.6	T	0	0	0	0	T	2.2	4.0	31.5
Joliet	15	6.6	9.5	5.6	0.9	0.3	0	0	0	0	0.1	4.2	6.0	33.2
Kishwaukee	15	9.9	11.2	6.1	0.9	0.1	0	0	0	0	0.1	4.6	5.0	37.9
LaGrange	16	7.8	11.4	5.2	0.4	0.1	0	0	0	0	0.1	2.7	1.2	31.9
Lanark	18	6.5	6.2	5.2	1.2	0.1	0	0	0	0	0.4	2.4	5.5	27.5
LaSalle	4	7.3	7.3	4.7	0.5	0.1	0	0	0	0	T	0.7	3.0	23.7
Morrison	12	8.8	9.9	4.2	1.2	0	0	0	0	0	0.3	1.2	5.9	31.5
Ottawa	19	8.0	8.9	4.5	0.4	T	0	0	0	0	T	2.3	3.8	27.9
Streator	12	6.6	6.9	3.8	0.5	T	0	0	0	0	0.1	2.9	3.1	23.9
Sycamore	16	7.4	10.0	4.3	0.5	T	0	0	0	0	0.1	3.8	5.4	31.5
Tiskilwa	14	7.2	9.6	6.1	1.0	0.1	0	0	0	0	T	3.4	4.4	31.8
Walnut	16	7.6	9.1	5.0	0.7	T	0	0	0	0	0.1	2.5	3.8	28.8
Winnebago	20	9.7	11.6	8.2	1.4	0.2	0	0	0	0	0.2	4.4	6.5	42.2

Section 64—Northern Illinois.

Mean Temperature.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Aledo	8	24.1	21.6	39.5	49.7	61.2	68.6	74.1	71.8	65.6	53.5	37.4	27.3	49.5
Antioch	7	20.7	19.1	36.5	44.4	57.0	65.4	72.1	69.2	63.8	49.6	37.6	25.7	46.8
Ashton	14	22.1	19.9	34.7	47.8	59.8	67.9	72.8	70.9	64.1	51.5	37.1	24.4	47.8
Aurora	29	20.8	22.4	34.6	48.0	59.2	68.9	73.2	71.0	63.8	51.5	37.2	26.4	48.1
Cambridge	16	22.3	22.1	36.3	50.4	62.4	70.0	75.2	73.1	65.7	53.5	38.4	26.4	49.6
Chicago	36	24.0	25.5	34.9	46.2	56.6	66.5	72.3	71.2	64.8	53.2	39.2	29.3	48.7
Davenport, Iowa	35	21.4	24.0	35.5	40.1	61.1	70.2	75.1	72.8	65.4	53.4	38.5	27.6	49.6
Dixon	18	20.5	20.6	34.8	48.7	59.8	69.5	74.0	72.0	64.7	51.7	36.6	25.4	48.2
Dubuque, Iowa	35	18.6	21.5	33.6	49.1	60.4	69.2	74.2	71.8	63.9	51.9	36.1	25.1	48.0
Galva	16	22.3	21.0	36.6	49.8	61.2	69.8	74.4	72.5	65.6	53.1	37.6	25.9	49.2
Henry	20	23.1	23.7	36.9	50.0	61.4	70.4	74.4	72.3	65.5	52.6	38.4	28.6	49.8
Joliet	17	24.4	22.6	37.0	48.7	61.0	69.5	73.9	71.7	64.8	52.1	38.8	27.7	49.4
Kishwaukee	20	20.3	20.8	33.8	47.7	58.3	68.5	73.1	70.8	63.6	51.3	36.9	26.2	47.6
LaGrange	16	23.0	21.8	35.5	47.5	58.5	68.2	73.1	71.1	64.2	52.1	38.0	26.8	48.3
Lanark	19	20.8	20.6	33.3	47.7	58.9	67.9	72.6	70.2	62.7	50.3	35.9	25.3	47.2
LaSalle	33	22.3	25.0	36.8	49.8	60.8	70.1	75.3	72.0	63.9	51.9	37.8	27.5	49.4
Morrison	14	21.2	20.0	35.0	49.3	60.4	68.6	73.3	71.7	64.7	53.1	37.9	25.0	48.4
Ottawa	22	24.0	24.4	37.0	50.6	61.4	70.9	75.2	72.2	65.4	53.2	39.0	29.2	50.2
Streator	15	25.1	22.7	38.5	49.8	61.5	70.5	75.0	72.9	66.6	53.9	39.7	27.9	50.3
Sycamore	28	19.6	20.9	33.1	47.1	58.2	67.8	71.9	69.6	62.6	50.3	35.9	25.6	46.9
Tiskilwa	14	23.6	21.1	36.0	49.1	61.5	69.6	74.0	72.1	65.1	52.6	38.4	26.3	49.1
Walnut	17	23.0	22.2	37.5	51.2	62.3	71.0	75.5	73.5	66.9	54.7	38.7	27.2	50.3
Winnebago	21	20.7	20.0	33.7	47.8	58.3	68.3	72.8	70.7	63.4	51.2	36.0	25.5	47.4

Section 64—Northern Illinois.

Lowest Temperature.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Aledo	8	−20	−30	0	21	27	38	47	45	29	20	6	−17	−30
Antioch	7	−25	−25	4	18	23	36	42	41	30	20	3	−18	−25
Ashton	14	−26	−32	−3	15	24	35	43	43	20	10	−2	−23	−32
Aurora	29	24	25	−10	15	27	34	40	39	24	12	−5	−20	−25
Cambridge	14	−25	−25	−1	15	27	41	50	46	25	14	−2	−16	−25
Chicago	38	−20	−21	−12	17	27	40	50	47	32	14	−2	−23	−23
Davenport, Iowa	36	−27	−25	−8	14	29	39	49	44	28	17	−10	−22	−27
Dixon	17	−26	−27	−2	13	25	34	43	38	23	14	−4	−16	−27
Dubuque, Iowa	35	−32	−31	−12	14	26	39	40	41	24	15	−12	−24	−32
Galva	16	−19	−28	−4	11	27	34	46	41	23	15	−4	−18	−28
Henry	20	−26	−27	−7	11	24	33	41	39	20	11	−3	−18	−27
Joliet	17	−20	−23	0	14	28	38	43	41	28	17	0	−15	−23
Kishwaukee	14	−21	−26	−3	15	26	32	40	39	28	13	−3	−22	−26
LaGrange	16	−20	−22	0	15	27	37	43	41	27	14	2	−18	−22
Lanark	19	−25	−29	−11	14	22	31	35	36	14	8	−7	−24	−29
Lasalle	4	−8	−24	8	23	30	42	49	49	33	24	12	2	−24
Morrison	14	−21	−30	−4	14	27	37	41	43	19	19	−4	−22	−30
Ottawa	21	−26	−24	−2	12	29	37	42	42	26	13	−4	−14	−26
Streator	15	−18	−26	−3	18	27	38	43	42	20	15	−11	−13	−26
Sycamore	16	−23	−26	−1	14	24	37	40	40	22	10	−2	−19	−26
Tiskilwa	14	−20	−28	−3	13	27	35	49	48	25	21	−3	−19	−28
Walnut	16	−21	−26	−1	13	29	37	44	37	22	17	−2	−19	−26
Winnebago	20	−23	−26	−15	14	25	32	41	40	18	11	−6	−21	−26

Section 64—Northern Illinois.

Prevailing Wind Direction.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Chicago, Ill	37	SW.	W.	NE.	NE.	NE.	NE.	SW.	SW.	SW.	SW.	SW.	SW.	SW.
Davenport, Iowa	36	NW.	NW.	NW.	NW.	SW.	SW.	SW.	SW.	SW.	SW.	NW.	NW.	NW.
Dubuque, Iowa	33	NW.	NW.	NW.	NW.	SE.	SE.	NW.	NW.	S.	NW.	NW.	NW.	NW.
LaSalle	4	W.	W.	NE.	W.	NE.	SW.	SW.	SW.	SW.	SW.	W.	W.	SW.

Section 64—Northern Illinois.

Highest Temperature.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Aledo	8	63	63	85	88	90	97	108	95	95	89	84	57	108
Antioch	7	58	52	81	84	90	94	104	97	100	84	70	53	104
Ashton	14	61	58	80	89	91	98	108	98	100	92	76	55	108
Aurora	29	61	64	82	91	94	101	109	99	101	92	76	65	109
Cambridge	14	63	65	84	87	91	98	107	100	98	86	73	58	107
Chicago	38	65	63	80	88	94	98	103	98	98	87	75	68	103
Davenport, Iowa	36	63	67	82	87	90	98	106	98	99	90	78	65	106
Dixon	17	62	62	84	90	92	100	108	99	100	95	79	62	108
Dubuque, Iowa	35	63	67	86	88	94	99	106	100	97	89	74	67	106
Galva	16	64	66	84	91	93	100	108	99	101	93	75	60	108
Henry	20	65	62	85	90	97	103	111	102	104	92	81	69	111
Joliet	17	63	65	84	90	95	100	104	100	101	96	86	67	104
Kishwaukee	14	60	65	83	88	94	100	108	100	97	88	79	54	108
LaGrange	16	62	62	83	92	93	97	104	99	99	87	76	61	104
Lamark	19	62	60	81	88	92	100	107	99	97	90	74	61	107
LaSalle	4	63	56	83	81	91	91	96	95	94	85	71	59	96
Morrison	14	65	57	81	88	93	101	111	100	103	89	74	58	111
Ottawa	21	64	65	83	92	99	103	112	103	102	90	76	64	112
Streator	15	64	64	84	92	96	98	107	100	103	92	77	65	107
Sycamore	16	59	59	82	90	94	99	106	99	99	93	71	55	106
Tiskilwa	14	67	59	83	91	100	101	108	99	100	86	74	59	108
Walnut	16	64	64	85	94	95	100	108	103	103	98	75	59	108
Winnebago	20	60	63	81	89	92	99	110	100	98	89	72	62	110

Section 64—Northern Illinois.

Mean Relative Humidity.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Chicago, 8 A. M.	20	85	84	81	76	76	76	74	74	75	76	80	83	78
Chicago, 8 P. M.	20	80	80	77	70	69	71	67	69	68	68	73	79	72
Davenport, Iowa, 8 A. M.	20	84	80	80	75	75	78	77	80	82	81	82	83	80
Davenport, Iowa, 8 P. M.	20	77	75	67	56	60	62	58	61	61	62	68	75	65
Dubuque, Iowa, 8 A. M.	33	78	82	78	71	74	77	78	81	83	81	81	80	78
Dubuque, Iowa, 8 P. M.	33	75	75	72	63	64	68	66	68	70	69	73	76	70
LaSalle, 8 A. M.	4	86	84	84	79	76	79	84	86	86	82	84	84	83
LaSalle 8 P. M														

Average Hourly Wind Movement (in Miles).

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Chicago	15	18	18	19	19	17	14	14	14	16	17	18	19	17
Davenport, Iowa	36	9	9	10	10	9	7	7	6	7	8	8	8	8
Dubuque, Iowa	32	6	6	7	7	6	6	5	5	5	6	6	6	6
LaSalle	4	9	10	10	10	9	8	6	6	6	8	8	8	8

Section 64—Northern Illinois.

Frost Data.

Stations.	Length of record—Years.	Average date of first killing frost in autumn.	Average date of last killing frost in spring.	Earliest date of killing frost in autumn.	Latest date of killing frost in spring.
Aledo	8	Oct. 13	Apr. 29	Sept. 29	May 11
Antioch	7	Oct. 5	May 4	Sept. 29	May 16
Ashton	14	Oct. 5	Apr. 29	Sept. 28	May 27
Aurora	22	Oct. 6	May 6	Sept. 17	May 31
Cambridge	14	Oct. 10	Apr. 22	Sept. 20	May 14
Chicago	38	Oct. 15	Apr. 16	Sept. 18	May 29
Davenport, Iowa	36	Oct. 13	Apr. 22	Sept. 18	May 22
Dixon	17	Oct. 6	Apr. 27	Sept. 19	May 27
Dubuque, Iowa	35	Oct. 13	Apr. 21	Sept. 27	May 21
Galva	16	Oct. 10	Apr. 29	Sept. 20	May 31
Henry	20	Oct. 7	May 5	Sept. 19	June 6
Joliet	15	Oct. 9	Apr. 26	Sept. 20	May 21
Kishwaukee	13	Oct. 1	May 4	Sept. 18	June 6
LaGrange	16	Oct. 11	May 1	Sept. 21	May 21
Lanark	21	Oct. 1	May 6	Sept. 12	June 7
LaSalle	4	Oct. 13	Apr. 28	Oct. 9	May 11
Morrison	14	Oct. 6	May 1	Sept. 19	May 31
Ottawa	19	Oct. 8	Apr. 26	Sept. 19	May 21
Streator	16	Oct. 8	Apr. 30	Sept. 18	May 30
Sycamore	16	Oct. 1	May 4	Sept. 14	May 27
Tiskilwa	14	Oct. 14	Apr. 28	Sept. 29	May 27
Walnut	16	Oct. 8	Apr. 24	Sept. 20	May 14
Winnebago	20	Oct. 2	May 2	Sept. 18	June 6

Section 65—Precipitation in Central Illinois.

Alexander, Morgan County, Ill.—Elevation, 670 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.	Annual.
†1887	0.89	2.48	1.20	1.50	2.96	.....	.....	.....	.....	0.30	1.76	3 03	.....
†1888	2.82	1.82	2.24	1.04	5.54	4.21	6.30	1.53	2.05	2.15	2.00	2.64	34.34
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1895	.....	.....	.....	.....	.....	2.43	6.55	1.99	3.82	0.28	2.78	6.82	.....
1896	1.19	1.69	0.82	2.49	4.27	4.63	7.50	0.89	5.49	1.98	1.09	0.22	32.26
1897	6.05	0.83	4.42	4.35	3.39	4.52	2.41	2.20	0.24	0.33	3.50	2.42	34.66
1898	4.21	2.81	5.25	3.15	5.83	5.14	2.28	3.17	5.19	3.80	2.56	1.19	44.58
1899	0.96	2.19	2.05	1.18	9.15	1.91	1.84	3.92	4.29	3.07	2.31	1.48	34.35
1900	1.10	3.46	1.47	1.13	2.75	3.09	2.74	3.69	5.29	2.86	3.05	0.24	30.87
1901	2.33	1.44	2.75	1.34	0.70	2.23	1.44	2.84	1.54	2.00	0.88	2.15	21.64
1902	0.70	0.97	3.05	3.26	2.19	7.01	3.27	5.38	4.01	2.29	3.08	2.45	37.66
1903	1.07	2.93	2.67	3.67	3.42	5.20	3.54	2.90	3.57	2.12	0.78	1.09	32.96
1904	1.74	1.40	4.51	5.26	3.56	4.90	3.74	3.84	3.86	0.27	0.05	0.68	33.81
1905	2.67	0.88	1.75	1.82	3.51	3.61	4.33	4.58	3.98	3.67	1.43	1.42	33.65
1906	1.72	2.47	2.98	2.22	4.20	2.98	0.89	5.03	3.23	0.95	3.02	2.84	32.53
1907	5.26	0.26	4.23	2.53	2.38	2.94	8.57	7.78	1.09	1.55	1.25	2.58	40.42
1908	1.27	3.07	2.08	4.97	7.78	3.14	2.31	1.21	1.40	0.22	1.81	1.29	30.55
Means	2.27	1.91	2.76	2 66	4 11	3.86	3.85	3.40	3 27	1.74	1.96	2.03	33.82

† Values for 1887 and 1888 are for Jacksonville, 10 miles distant.

Section 65—Precipitation in Central Illinois.

Bloomington, McLean County, Ill.—Elevation, 840 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec	Annual.
1886	2 00	1 46	1.81	1 87	2.49	3.71	.....	1.85	4.35	0.78	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1892	.....	2.31	1.48	6.41	8.27	6.86	4 68	1.16	2.70	1.25	2.62	1.21	.....
1893	1.36	3.13	3.11	8 34	5.40	0.80	1.16	0.15	2.70	0.74	1.93	1.47	30.29
1894	2.32	1.93	3.37	2.53	3 21	1.89	1.34	0.91	5.59	†0.50	2.52	1.86	27 97
1895	1.26	0.39	1 68	2 55	1.13	1.75	6.71	5.12	4.28	0.61	3.74	7 62	36.84
1896	0 82	2.55	2.11	2 02	6 79	3.90	6 68	4 75	5.40	0.16	2.95	0.53	38.66
1897	5.41	1.77	4.09	3 92	1 90	3.49	3.91	1.50	2.08	0.48	5.00	2 00	35.55
1898	4.00	1.77	5 65	2 66	9 42	4 02	1 40	1.85	6.49	4.31	2.28	1.92	48 77
1899	1.52	2.20	4.72	0 82	4.06	4 05	1 92	2 15	1.98	2 69	1 67	2.15	31 83
1900	1 23	5.94	2 60	1 85	5 40	2 49	3.38	3 38	1 55	2 62	3.96	0.65	35.05
1901	1 70	1 81	4 04	0 94	2 09	4 79	1 96	1 07	1 87	2 14	1 11	3 08	26 63
1902	0 90	1 75	4 45	2 43	2 07	12 45	7 97	5 81	4.91	2 70	2.75	2.24	50.43
1903	1.31	3 32	3 24	5 76	4 01	3 25	4 63	2 04	2 75	1 48	1 47	2 49	35.75
1904	3.71	1 35	5.28	1 45	3 20	1 40	3 89	2 95	5.65	0.52	0 19	1 53	34.12
1905	1.37	1 82	2 18	5 11	5.56	3 44	1 06	2 96	3 59	2 89	2.05	1.89	37.52
1906	2.66	1.57	2 39	2 83	2 88	3 96	1 27	4 30	4 30	1 85	3 80	3 68	35 49
1907	5.18	0 07	4 50	3 54	2.85	5 74	6 25	6.25	2 69	1 33	2 17	3.10	43.67
1908	1.20	3.80	3 12	7 78	10 17	1 53	2 10	1 17	0 45	0 50	2 48	1 47	35.77
Means	2 23	2 16	3 32	3 66	1 76	3 86	3 90	2.74	3 52	1 53	2 55	2 29	36 52

† Estimated from surrounding stations.

Section 65—Precipitation in Central Illinois.

Bushnell, McDonough County, Ill.—Elevation, 662 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1892	.....	.....	.....	.....	.....	.....	.....	.....	2.11	1.19	2.55	1.63	.....
1893	0.68	1.47	2.11	6.80	4.36	2.15	2.59	4.89	3.17	T	1.92	1.34	31.48
1894	1.05	1.40	2.28	2.46	2.23	4.69	0.66	0.92	6.86	1.37	2.12	1.15	27.19
1895	1.62	0.26	0.69	3.54	2.72	1.94	6.28	3.33	6.50	0.71	3.20	.....	.....
1896	1.00	1.40	0.43	3.45	4.44	2.58	8.34	3.34	6.96	1.65	1.67	0.22	35.48
1897	5.20	0.69	4.43	3.90	1.11	2.82	4.68	0.53	1.16	0.21	2.77	1.69	29.19
898	3.58	1.64	5.90	.....	.....	.....	.....	.....	6.23	2.67	2.37	0.55	.....
1899	0.66	2.07	2.92	3.69	7.68	3.94	2.44	4.33	3.83	2.61	1.40	1.20	36.77
1900	2.20	.....	1.50	1.94	4.12	1.53	2.70	4.04	5.15	2.90	1.40	0.07	.....
1901	0.87	1.10	2.85	0.13	0.70	3.11	4.24	1.20	2.60	0.70	1.60	1.50	20.60
1902	.....	.....	.....	.....	1.70	6.90	4.50	†7.88	†3.06	†2.42	†1.71	†2.39	.....
1903	†0.88	†1.48	†2.42	†3.87	3.26	1.43	1.70	5.20	4.80	2.43	1.37	†0.87	29.71
1904	3.45	0.40	4.02	3.04	2.35	3.70	7.27	3.63	2.89	0.44	0.00	1.05	32.24
1905	0.85	1.60	2.28	4.12	3.99	*7.03	3.03	1.85	5.99	3.89	2.25	1.31	38.19
1906	2.44	2.00	4.66	2.95	2.23	2.03	1.08	1.32	5.72	1.36	1.80	2.30	29.89
1907	3.83	0.00	4.20	3.17	2.62	3.23	7.16	5.62	1.34	0.45	1.17	1.51	34.30
1908	0.26	2.54	1.88	1.86	8.05	3.57	3.61	1.38	0.96	0.75	3.01	0.13	28.00
Means	1.90	1.29	2.84	2.99	3.44	3.38	4.02	3.30	4.08	1.51	1.90	1.18	31.83

* Values for Colchester, 18 miles distant.
† Values for Fandon, 18 miles distant.

Section 65—Precipitation in Central Illinois.

Carlinville, Macoupin County, Ill.—Elevation, 663 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
‡1856	1.50	.....	.....	.....	.....	6.56	2.64	5.80	8.50	3.51	1.78	0.80	.....
‡1857	1.23	2.40	1.70	1.40	1.40	2.40	1.00	1.50	9.76	0.40	2.30	1.30	17.73
‡1858	1.80	1.80	1.90	2.10	3.20	3.26	5.35	0.36	1.81	3.80	3.52	2.37	31.27
‡1859	1.97	3.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
†1883	1.17	7.42	1.47	4.33	3.80	5.00	5.26	1.37	0.10	6.30	4.07	2.46	42.75
†1884	2.17	4.11	3.79	2.33	4.27	3.96	2.30	2.56	7.19	2.33	1.86	5.80	42.97
†1885	5.19	0.87	0.42	4.27	1.98	8.22	2.29	3.96	5.73	4.89	1.35	3.06	42.23
†1886	6.10	1.39	2.86	.....	6.30	7.58	0.16	2.94	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1891	§0.79	1.93	2.39	2.08	2.56	3.48	1.27	5.34	0.62	0.94	5.25	1.08	27.64
1892	1.52	3.77	2.42	9.34	9.90	5.72	4.13	1.91	2.23	1.78	4.42	1.69	48.83
1893	0.37	5.72	3.68	9.23	4.59	4.10	1.84	0.51	2.57	1.69	1.37	1.45	37.12
1894	3.09	2.77	3.15	3.12	2.33	1.42	1.77	1.20	5.28	1.07	3.46	1.90	30.51
1895	1.08	1.02	1.60	2.08	1.42	3.16	5.58	2.14	3.43	0.42	2.91	6.75	31.59
1896	1.28	2.76	1.51	2.48	8.11	6.60	6.53	4.63	3.87	1.35	2.01	0.43	41.56
1897	3.91	1.62	6.72	5.85	2.66	3.91	3.33	1.65	T	0.21	5.06	2.89	37.81
1898	1.98	1.96	7.49	4.30	7.58	3.66	3.68	2.68	5.39	4.60	2.63	2.16	51.11
1899	1.79	2.30	3.24	1.27	7.01	1.71	2.54	6.48	2.29	3.91	2.30	2.38	37.22
1900	0.61	4.70	1.72	1.36	4.85	4.88	5.99	1.42	5.03	2.42	2.43	0.95	36.36
1901	1.70	1.81	4.15	2.56	0.86	3.65	0.72	1.83	0.83	2.63	1.49	4.54	26.77
1902	1.14	0.86	4.18	2.44	3.37	10.82	1.82	5.43	3.76	3.06	3.23	3.39	43.50
1903	1.57	3.76	2.18	5.62	3.17	3.75	3.89	3.38	3.69	1.50	0.54	1.75	34.80
1904	2.64	1.09	8.69	6.88	2.93	3.86	9.51	3.57	4.11	0.43	0.08	1.02	44.72
1905	2.39	1.17	2.04	3.68	4.26	1.20	7.44	4.65	3.88	5.14	1.68	2.18	39.71
1906	3.12	3.06	4.20	2.60	2.33	2.17	7.73	5.86	4.96	1.97	3.94	2.57	44.51
1907	5.57	0.57	2.67	3.21	4.36	5.01	5.59	3.77	0.63	1.52	1.78	2.45	37.13
1908	1.56	4.81	2.41	5.11	9.08	3.42	2.36	1.35	2.28	0.23	3.37	1.70	37.68
Means	2.32	2.69	3.19	3.81	4.26	4.38	3.79	3.05	3.29	2.34	2.62	2.42	38.16

‡ Data for 1856 to 1859, inclusive, are from Brighton, 21 miles distant.
† Data for 1883 to 1886, inclusive, are from Bunker Hill, 17 miles distant.
§ Interpolated from surrounding stations.

Section 65—Precipitation in Central Illinois.

Charleston, Coles County, Ill.—Elevation, 720 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1870.....	.....	.....	.....	1.92	2.63	2.86	4.40	4.34	0.66	3.46	2.01	1.85	.....
*.....	*	*	*	*	*	*	*	*	*	*	*	*	*
†1880.....	6.38	6.37	6.00	6.00	7.00	2.75	3.00	3.38	2.50	2.10	2.50	2.70	50.68
1881.....	†1.45	5.25	†3.90	†2.00	†1.38	†5.75	1.12	†0.87	3.95	7.30	8.20	3.50	44.64
1882.....	2.90	†8.60	5.10	3.81	5.80	7.70	1.82	†5.94	1.60	3.64	2.04	2.80	51.75
1883.....	1.20	9.10	†1.28	†3.03	†4.14	†3.94	†4.64	†1.78	†0.80	†9.40	†4.73	†2.26	46.30
†1884.....	0.90	5.44	2.75	4.16	5.00	6.87	3.65	2.20	4.70	2.80	1.83	5.45	45.75
1885.....	†2.25	2.56	0.25	4.74	3.10	4.98	2.83	6.47	4.49	3.24	2.61	3.34	40.86
1886.....	2.80	1.04	3.32	2.73	3.56	2.69	3.66	2.90	4.02	0.74	2.86	1.92	32.24
1887.....	1.02	3.80	3.40	2.60	3.51	0.07	0.56	2.30	3.32	0.97	7.06	4.75	33.36
1888.....	2.97	2.70	3.12	2.43	4.82	6.77	2.35	3.25	1.42	2.37	4.35	2.43	38.98
1889.....	1.80	1.63	1.25	0.90	4.19	‡7.50	5.65	1.53	‡2.90	2.01	‡4.60	‡1.00	34.96
1890.....	.....	3.41	3.37	2.66	3.40	6.75	6.98	1.87	2.22	2.19	1.93	1.13	.....
1891.....	0.91	2.82	3.97	2.51	†0.60	†4.25	†1.88	†4.95	1.43	1.47	5.59	1.90	32.28
1892.....	1.13	5.65	1.29	10.11	10.90	3.81	3.35	2.72	†1.20	†0.85	†4.75	†0.90	46.66
†1893.....	1.08	2.71	.....	.....	4.60	2.00	4.35	1.21	3.37	.....	2.60	0.59	.....
†1894.....	1.53	1.46	3.33	1.81	1.02	2.25	3.84	2.23	4.60	0.39	3.24	1.72	27.42
†1895.....	0.57	0.71	1.04	2.36	0.73	2.86	3.37	‡3.26	‡2.74	0.60	2.61	3.36	24.21
1896.....	1.02	1.99	1.85	1.30	6.41	8.12	10.04	3.18	6.53	0.49	3.82	1.08	45.83
1897.....	4.47	2.28	5.26	6.41	2.93	6.60	1.96	0.39	1.67	0.42	5.42	3.05	40.86
1898.....	4.44	1.38	8.90	3.59	4.79	2.79	1.93	3.14	4.46	4.14	1.66	1.80	43.02
1899.....	2.97	2.55	2.75	0.67	6.86	2.56	0.71	1.41	0.89	4.43	2.95	2.90	31.35
1900.....	0.45	4.52	1.99	1.79	4.00	4.10	†4.76	4.73	3.22	3.63	2.81	1.23	37.23
1901.....	1.39	2.30	3.82	†2.18	2.87	†5.95	†1.20	†1.07	†1.46	†3.45	1.62	3.17	30.48
1902.....	0.97	1.96	3.67	2.33	3.46	7.78	3.78	4.24	4.98	1.99	2.52	3.94	41.72
1903.....	1.68	2.97	1.77	4.41	0.63	5.55	5.32	5.57	1.94	2.68	1.47	2.01	36.03
1904.....	3.92	1.20	9.42	4.54	4.80	1.96	3.67	4.93	5.80	0.80	0.18	1.84	43.06
1905.....	1.82	1.49	1.80	3.00	4.29	1.78	7.19	1.53	2.31	5.53	1.85	2.36	34.95
1906.....	3.31	1.54	4.80	1.32	3.12	2.98	2.92	1.96	4.18	1.41	4.34	3.68	35.56
1907.....	4.72	0.34	4.42	2.35	2.79	3.75	7.10	3.59	0.72	2.19	2.60	3.42	37.99
1908.....	1.28	5.10	3.05	3.60	6.96	3.42	2.94	0.85	1.10	0.18	3.51	1.38	33.37
Means.....	2.19	3.20	3.46	3.15	4.01	4.37	3.70	2.93	2.84	2.57	3.28	2.42	38.12

‡ Estimated from surrounding stations.
† Values (including all of years 1880, 1881, 1893, 1894 and 1895) are for Mattoon, 11 miles distant

Section 65—Precipitation in Central Illinois.

Coatsburg, Adams County, Ill.—Elevation, 738 Feet.

Year	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept	Oct.	Nov.	Dec.	Annual.
1864	2.70	0.53	1.53	10.00	5.00	4.00	1.50	3.00	3.50	4.00	3.01	5.65	44.42
1865	0.15	3.45	4.50	5.03	0.37	8.12	10.00	1.37	7.00	3.01	0.12	1.25	44.42
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1870	.....	.....	.....	.....	1.30	2.18	6.00	6.70	7.30	4.90	1.51	1.60	.....
1871	3.80	2.80	4.80	3.00	4.60	4.00	2.80	5.20	2.60	7.60	4.03	1.60	46.83
1872	1.20	1.96	5.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1886	.....	1.88	1.98	1.87	4.00	4.10	0.08	5.53	6.60	1.30	1.50	0.80	.....
1887	1.45	3.55	0.87	2.43	.....	2.82	2.66	1.07	.....	0.81	1.59	.....	.....
1888	2.99	2.22	4.24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	.....	.....	.....	.....	8.25	3.48	3.70	1.05	.....	3.95	.....	.....	.....
1890	1.21	1.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.08	.....
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1892	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	1.74	.....	.....	.....	.....	.....	.....	.....
1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	.....	.....	.....	5.88	4.90	2.29	0.34	3.36	3.48	.....
1896	1.00	.....	0.94	.....	.....	.....	.....	.....	4.46	1.65	1.82	0.66	.....
1897	6.70	0.87	4.16	4.09	1.75	4.31	7.85	1.22	0.34	0.53	3.10	2.26	37.18
1898	3.71	2.26	7.09	4.83	6.63	5.43	3.09	2.11	8.89	2.80	2.89	1.53	51.26
1899	†0.46	1.80	2.50	1.34	8.19	2.25	3.31	4.95	2.53	3.13	2.66	1.32	34.44
1900	2.25	5.73	0.45	1.26	4.79	1.45	1.57	3.29	4.04	4.07	0.91	0.31	30.12
1901	1.70	1.07	3.09	2.42	0.45	6.66	2.38	0.32	2.51	0.94	1.62	2.27	25.43
1902	0.48	1.11	4.31	2.77	4.10	9.90	3.87	4.53	2.01	2.21	2.85	2.80	40.94
1903	1.28	1.95	2.54	5.15	3.68	4.50	2.24	4.23	4.42	1.77	0.88	1.17	33.81
1904	3.42	1.20	3.77	6.44	5.27	6.21	3.93	4.65	8.38	0.16	0.36	1.67	45.46
1905	1.19	0.95	1.53	2.42	3.04	4.55	4.09	2.95	5.88	3.98	1.93	1.29	33.80
1906	3.00	2.19	2.40	2.95	2.08	4.02	2.26	5.68	5.56	0.82	1.86	1.54	34.36
1907	5.42	T	3.63	2.59	2.14	4.30	6.38	7.12	1.92	1.25	1.49	1.75	37.99
1908	0.97	3.28	0.73	3.03	6.40	5.90	5.89	2.25	2.31	0.97	3.80	0.80	36.33
Means	2.37	2.00	3.01	3.62	4.00	4.50	3.97	3.61	4.34	2.39	2.06	1.74	37.61

† Estimated from surrounding stations.

Values for 1864 and 1865 are for York Neck; values for 1870 to 1872, inclusive, are for Quincy; values for 1886 to 1888, inclusive, are for Payson; values for 1889 and 1890 are for Quincy; values for June, 1893 is for Liberty; values for 1895 to 1908, inclusive, are for Coatsburg, all stations are in the same county.

Section 65—Precipitation in Central Illinois.

Decatur, Macon County, Ill.—Elevation, 685 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1870.....	2.85	0.95	2.97	1.50	0.80	1.50	1.50	4.00	2.60	3.30	1.68	2.25	25.90
1871.....	4.60	1.65	3.05	.....	2.35	1.90	1.85	1.05	0.25	2.50	1.95	1.15	.....
1872.....	1.10	1.25	2.32	2.00	2.85	7.50	4.60	1.55	2.61	.....	0.90	1.45	.....
1873.....	3.30	2.65	0.65	6.40	2.95	1.65	3.80	.....	2.90	1.95	2.40	2.75	.....
*.....	*	*	*	*	*	*	*	*	*	*	*	*	*
1886.....	2.50	0.90	2.60	1.60	3.80	6.40	0.30	5.80	5.70	0.20	2.20	0.85	32.85
1887.....	.....	.....	.....	.....	.....	.....	.....	1.95	.....	.....	.....	.....	.....
*.....	*	*	*	*	*	*	*	*	*	*	*	*	*
1892.....	.....	.....	.....	4.20	5.24	.....	3.11	1.84	2.95	T	5.46	T	.....
1893.....	0.95	.....	3.82	.....	.....	.....	.....	.....	.....	.....	.....	1.41	.....
1894.....	1.83	2.39	2.79	3.06	1.90	2.23	2.33	1.64	2.94	0.42	1.77	2.65	25.95
1895.....	1.19	0.94	1.18	2.75	1.07	4.40	3.42	1.35	4.47	0.55	3.12	6.47	30.91
1896.....	0.97	2.91	1.44	1.56	4.75	4.00	7.12	3.00	5.80	0.66	2.81	0.32	35.34
1897.....	3.83	1.23	5.08	3.87	3.21	4.22	3.03	1.40	0.41	0.28	4.57	2.54	33.67
1898.....	5.18	2.71	9.85	3.36	5.74	2.39	1.07	2.16	5.47	5.34	2.96	1.68	47.91
1899.....	1.89	2.43	2.58	0.59	7.01	2.11	1.02	2.56	1.50	4.20	2.01	2.37	30.27
1900.....	0.59	5.89	1.84	1.46	4.78	4.18	7.40	4.71	4.34	1.33	3.48	0.92	41.32
1901.....	1.78	1.17	3.23	1.98	2.00	5.33	0.49	0.86	1.27	3.18	1.54	4.43	27.26
1902.....	1.06	1.42	3.93	2.26	2.80	9.03	2.43	7.01	4.98	2.08	2.45	3.83	43.28
1903.....	1.60	4.13	2.48	4.84	3.66	2.61	4.57	5.16	2.67	4.07	1.74	2.16	39.69
1904.....	2.73	1.33	7.29	3.39	2.67	2.18	4.44	5.55	9.48	0.18	0.07	1.84	41.15
1905.....	2.02	1.72	1.56	3.11	4.54	1.69	3.82	1.44	3.05	4.76	1.70	1.90	31.31
1906.....	3.04	1.90	4.93	3.02	6.73	1.78	3.45	5.35	3.47	2.46	4.63	3.51	44.27
1907.....	7.47	0.30	4.75	2.94	2.89	4.29	7.03	7.36	2.08	1.01	2.07	2.89	45.08
1908.....	1.64	4.29	3.87	4.54	10.23	3.81	2.25	1.25	1.27	0.71	2.09	1.67	37 62
Means.....	2.48	2.11	3.44	2.92	3.90	3.66	3.29	3.19	3.34	1.96	2.46	2.23	34 98

Section 65—Precipitation in Central Illinois.

Griggsville, Pike County, Ill.—Elevation, 650 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1882	1.32	1.00	3.50	4.00	6.50	7.37	3.00	2.37	1.62	4.12	2.62	1.62	39.04
1883	1.00	5.50	1.50	4.00	3.37	6.87	2.25	1.75	0.87	6.37	3.25	0.75	37.48
1884	1.25	2.37	.....	2.50	4.37	5.25	2.37	3.12	3.24	4.25	1.87	2.50	.....
1885	2.12	0.87	0.62	6.00	2.62	4.50	0.87	2.62	5.75	2.75	1.50	1.75	31.97
1886	2.71	2.50	1.50	2.37	2.60	4.42	0.20	3.08	6.36	0.77	2.10	0.66	29.27
1887	1.40	4.62	1.57	2.36	2.89	1.97	2.72	0.61	4.36	0.52	2.32	4.05	29.39
1888	3.11	2.40	3.84	1.25	7.83	9.77	6.81	2.86	4.00	1.88	4.30	2.47	50.52
1889	2.84	2.40	1.05	*2.30	9.38	4.93	2.87	0.76	4.56	4.47	1.12	2.02	38.70
1890	3.31	1.43	2.75	2.85	3.31	5.32	1.47	1.85	2.47	1.48	1.40	0.28	27.92
1891	0.87	3.52	2.25	3.61	2.42	1.76	0.98	1.75	1.53	2.11	4.15	0.87	25.82
1892	2.05	3.73	2.67	6.97	8.93	1.85	5.94	0.85	3.46	1.52	3.20	0.92	42.09
1893	0.42	2.82	6.22	7.69	5.65	3.80	3.38	0.35	1.37	0.33	1.25	1.38	34.66
1894	2.06	2.36	2.15	2.85	2.30	2.97	0.78	1.19	2.78	0.78	1.48	1.32	23.02
1895	1.36	0.22	3.15	2.35	2.46	3.94	6.25	2.63	3.51	0.35	2.95	6.21	35.38
1896	1.50	2.16	0.56	3.05	8.10	3.29	8.10	2.72	9.32	1.60	1.65	0.38	42.43
1897	6.74	1.39	4.20	4.25	2.91	5.45	4.50	2.16	0.46	0.25	3.38	2.34	38.03
1898	4.46	2.19	5.78	4.95	8.30	4.94	3.56	4.49	6.83	3.01	3.66	0.97	53.14
1899	0.42	1.54	3.81	1.80	13.10	1.97	3.16	4.43	3.79	3.33	2.16	1.27	40.78
1900	1.78	6.01	1.54	1.81	4.20	2.40	3.59	1.81	5.50	2.80	1.66	0.45	33.55
1901	2.06	1.51	3.25	1.46	0.46	3.55	2.74	0.22	3.65	1.80	0.77	2.82	24.29
1902	0.56	1.53	2.67	3.99	4.21	7.33	2.89	7.20	3.36	2.58	3.74	2.65	42.71
1903	1.30	2.62	3.20	4.59	3.34	3.14	2.10	4.52	4.89	2.53	0.68	1.05	33.96
1904	3.93	1.60	5.60	5.92	5.86	5.05	5.09	5.41	6.26	0.50	0.15	1.02	46.39
1905	1.60	1.50	1.45	2.85	2.67	1.60	2.95	4.67	5.25	4.27	1.95	1.69	32.45
1906	2.74	2.26	3.05	2.71	2.83	2.74	0.85	4.10	6.56	1.98	2.70	2.65	35.47
1907	5.38	0.49	3.27	3.25	3.35	5.00	5.82	6.97	2.24	1.70	1.80	0.52	39.79
1908	1.05	2.75	1.94	5.66	5.60	3.69	6.53	1.30	0.88	0.10	1.41	1.28	32.19
Means	2.20	2.34	2.81	3.61	4.80	4.25	3.40	2.82	3.88	2.15	2.19	1.70	36.15

* Interpolated from surrounding stations.

Section 65—Precipitation in Central Illinois.

Hannibal, Marion County, Mo.—Elevation, 534 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1892	.....	.....	.....	.....	8.28	1.69	3.69	0.92	2.36	0.67	3.17	1.63	.....
1893	0 54	2.12	2.64	6.06	7.04	5.19	1.50	0.54	1.47	0.50	1.25	0.37	29.22
1894	2 29	2.51	1.77	1.74	2.93	2.52	1.07	1.03	2.40	1.22	1.77	1.24	22.59
1895	1 57	0.39	1.77	1.95	6.23	3.92	8.01	4 86	2.69	0.36	4.40	5.98	42.13
1896	1.54	1.74	0.92	2 83	7.14	2.40	9.44	1.58	3.54	1.72	1.73	0.65	35.23
1897	6.36	1.54	4.30	3.96	1.13	6.08	8.04	2.48	0.30	0.45	2.07	1.86	38.57
1898	3 64	1.60	6.41	3.48	6.90	4.83	4.20	1.05	8.86	2.94	2.58	1.12	47.61
1899	0.56	2.05	2.66	1.95	6.75	2.79	5.49	7.33	2.91	1.57	1.83	1.26	37.15
1900	1.69	3 87	1.16	1.34	5 65	1.75	1.79	1.86	4.57	3.88	1.27	0.33	29.16
1901	1 85	1.32	2.78	1.55	1.65	2.48	1.95	0.89	1.83	0.86	0.74	1.82	19.72
1902	0.78	0.68	2 95	2.99	4.83	6.22	2.96	4.02	2.36	2.94	2.53	1.76	35.02
1903	1.98	2.70	2.37	4.96	5.24	2.59	2.86	5.14	4.71	1.65	1.28	0.93	36.41
1904	2 81	1.12	3.82	5.35	5.84	5.21	3.26	8 23	5.63	0.61	0.26	1.15	43.29
1905	1 45	1.39	1.52	4.07	2.30	1.54	4.33	4.61	6.40	3.38	1.34	1.23	33.56
1906	2.28	2.08	2.57	2.77	3.54	3.26	0.90	4.90	5.72	0.61	2.97	1.88	33.48
1907	5.17	0.25	2.67	2.92	2.09	3.31	6.21	6.27	0.92	2.74	1.22	1.75	35.52
1908	1 04	4.05	0.94	3.64	4.60	6.27	1.48	2.94	3.31	0.43	2.52	1.13	32.35
Means	2 22	1 84	2 58	3 22	4.83	3.65	3.95	3.45	3.53	1.56	1.94	1.53	34.40

Section 65—Precipitation in Central Illinois.

Havana, Mason County, Ill.—Elevation, 475 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1870	.....	.....	.....	.....	.....	.....	.....	.....	3.36	3.95	2.50	1.71	.....
1871	4.28	1.60	4.25	2.05	1.00	3.05	5.25	2.15	.....	3.05	1.95	2.45	.....
1872	0.50	1.60	2.48	2.03	2.13	9.83	4.78	1.13	4.35	0.84	2.02	1.61	33.30
1873	5.00	1.83	0.99	6.20	5.58	1.24	5.50	0.89	5.69	3.17	1.68	7.72	45.49
1874	2.61	1.87	1.22	2.96	2.42	2.71	2.33	6.48	2.42	1.27	3.20	0.93	30.42
1875	0.37	2.54	4.14	2.44	4.74	4.83	8.57	1.30	5.84	2.80	0.81	2.08	40.46
1876	0.82	1.41	7.03	2.69	4.35	5.60	9.61	3.06	7.00	1.55	2.20	0.20	45.52
1877	0.81	0.10	5.29	3.01	2.65	9.13	2.17	2.92	2.20	6.90	4.70	4.45	44.33
1878	1.28	3.56	2.95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1892	1.65	1.98	1.54	4.84	7.69	3.02	2.29	.....	3.01	0.98	3.25	1.42	.....
1893	0.79	3.49	2.94	7.95	5.48	2.00	4.25	0.73	2.34	0.22	0.76	2.06	33.01
1894	2.08	2.32	2.13	1.68	2.23	3.26	1.04	1.84	3.67	1.11	1.98	1.97	25.31
1895	1.36	0.32	1.04	2.68	1.51	1.91	4.89	4.53	4.34	0.41	3.80	6.03	32.82
1896	1.21	2.13	0.98	3.15	4.31	3.25	4.87	3.36	5.30	0.59	1.84	0.33	31.31
1897	6.66	1.32	4.53	3.74	1.08	3.58	5.22	1.22	0.51	0.08	3.41	1.82	33.17
1898	4.64	2.08	4.84	2.90	7.63	4.58	2.49	2.78	6.92	2.55	2.24	1.45	45.10
1899	0.77	2.21	3.39	1.26	7.31	2.24	7.11	3.26	4.18	3.34	2.41	2.73	40.21
1900	1.88	5.54	0.72	1.01	1.33	3.48	4.13	9.02	2.65	2.00	1.57	0.40	33.75
1901	2.54	1.09	7.30	0.89	0.66	5.02	1.85	1.04	1.61	0.66	0.50	0.73	23.89
1902	0.85	1.42	4.31	2.70	2.57	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	2.55	3.02	5.48	5.66	2.18	0.89	1.35	.....
1904	3.11	1.46	4.32	4.03	4.19	3.40	4.50	2.50	3.02	0.31	0.17	1.26	32.27
1905	1.60	2.20	1.69	3.91	2.69	2.71	2.58	4.42	4.69	2.91	2.54	1.72	33.66
1906	1.69	1.37	2.94	3.26	1.84	2.73	1.78	3.51	5.24	0.85	2.37	1.53	29.11
1907	6.79	0.22	2.54	3.11	2.54	3.89	6.23	6.73	1.53	0.59	1.59	2.41	38.17
1908	0.55	4.35	1.06	4.33	8.73	4.45	2.94	1.67	0.74	0.53	2.01	1.17	32.53
Means	2.24	2.00	3.11	3.17	3.68	3.85	4.23	3.18	3.71	1.78	2.10	2.06	35.11

Section 65—Precipitation in Central Illinois.

Hillsboro, Montgomery County, Ill.—Elevation, 675 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1895	.....	.....	.....	.....	1.72	2.47	6.31	3.24	2.83	0.63	3.28	5.44	.....
1896	0.73	2.43	1.23	1.98	6.62	3.14	4.15	2.08	1.80	1.71	2.58	0.77	32.25
1897	4.02	2.02	6.04	4.07	1.59	3.93	5.16	1.16	T	0.25	5.80	2.82	36.86
1898	5.51	3.07	7.78	3.80	7.45	3.39	5.33	2.69	5.56	5.13	2.32	2.00	54.03
1899	1.83	2.51	3.54	1.29	7.28	2.84	2.18	7.49	1.59	3.67	2.45	3.48	40.15
1900	0.52	4.60	1.70	1.31	5.14	6.10	2.96	0.42	3.27	3.02	2.78	0.95	32.76
1901	1.92	1.98	3.05	2.15	1.46	2.54	1.93	4.26	1.03	2.31	1.72	3.66	28.01
1902	0.82	0.89	4.95	2.79	3.31	8.93	1.39	5.71	5.32	2.52	3.34	4.00	43.97
1903	1.19	3.16	2.22	3.57	2.83	4.26	2.56	5.63	1.87	1.78	0.61	3.05	32.73
1904	3.15	0.90	6.53	5.05	4.14	4.54	5.38	4.41	5.44	0.62	0.09	1.01	41.26
1905	2.98	0.86	1.63	3.21	4.67	1.96	5.32	2.53	3.16	9.72	1.65	2.15	39.84
1906	3.56	2.12	4.47	2.08	3.15	4.85	0.50	2.37	5.83	1.65	4.25	2.02	37.15
1907	4.89	0.55	1.90	2.78	7.00	4.88	7.53	5.81	0.96	3.90	1.77	3.36	45.33
1908	2.09	4.76	2.10	5.03	8.28	4.53	2.52	0.78	1.54	0.10	1.85	1.62	35.20
Means	2.55	2.21	3.63	3.01	4.62	4.17	3.80	3.47	3.09	2.65	2.46	2.60	38.26

Section 65—Precipitation in Central Illinois.

Keokuk, Lee County, Iowa—Elevation, 614 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1872	0.07	0.39	2.88	3.86	3.70	5.81	6.77	1.97	2.26	0.42	0.74	0.50	29.37
1873	3.40	0.53	0.51	5.65	3.42	1.21	7.73	0.54	3.37	4.69	1.43	8.56	41.04
1874	3.92	0.88	1.14	2.40	1.65	4.01	4.61	3.87	7.92	1.94	2.17	1.26	35.77
1875	0.61	1.84	1.67	0.89	6.70	8.33	12.70	3.83	4.62	2.71	0.59	3.93	48.42
1876	3.68	1.45	3.45	3.99	5.28	6.73	6.79	4.03	11.08	2.12	2.82	0.23	51.65
1877	0.84	0.15	3.86	4.22	5.55	7.82	7.06	2.52	3.61	7.11	3.05	2.90	48.59
1878	0.17	2.95	3.78	2.31	3.47	3.93	2.37	5.27	1.36	2.31	1.93	1.95	31.80
1879	0.50	0.53	1.71	1.56	2.27	2.63	1.98	4.57	1.12	0.28	3.91	1.45	22.51
1880	3.91	1.94	1.83	4.79	5.92	3.06	2.25	3.81	3.21	2.02	1.13	0.67	34.54
1881	0.50	2.58	2.42	3.12	1.35	8.70	3.08	0.86	4.10	8.01	2.59	1.70	39.01
1882	1.07	1.54	3.30	3.22	7.11	9.45	4.53	3.09	1.52	2.71	2.25	1.75	41.54
1883	1.24	6.13	1.07	2.97	4.87	5.88	3.15	1.32	1.76	6.95	2.09	1.20	38.63
1884	0.85	1.88	3.37	1.31	3.16	4.03	2.30	2.74	4.25	3.35	1.73	3.91	32.88
1885	2.44	1.14	0.17	3.33	2.59	6.97	2.29	5.98	3.77	3.59	0.88	1.96	35.11
1886	2.08	1.40	2.25	1.52	4.49	2.86	0.65	5.90	3.95	2.38	1.15	1.03	29.66
1887	1.48	5.19	0.76	1.84	2.54	1.55	1.57	2.38	3.13	1.98	1.18	2.73	26.33
1888	1.57	2.17	3.45	1.85	5.06	5.42	6.00	2.07	2.13	1.63	2.83	1.61	35.79
1889	1.89	0.90	1.04	3.60	5.72	2.97	6.78	0.95	5.14	2.88	1.80	1.08	34.75
1890	1.81	1.09	2.43	1.79	3.34	3.41	2.49	1.77	4.46	2.44	1.87	0.03	26.93
1891	2.59	1.32	2.27	5.06	2.56	3.66	2.77	6.10	0.49	1.49	3.60	1.33	33.24
1892	1.96	1.61	2.91	6.15	6.34	2.65	6.18	1.07	3.21	0.71	3.16	1.50	37.45
1893	0.92	1.76	2.66	5.41	4.36	2.37	2.60	1.16	3.18	0.33	2.29	0.90	27.94
1894	2.24	1.46	2.52	2.75	3.06	2.85	0.37	0.51	4.86	1.28	2.24	1.06	25.20
1895	1.44	0.19	1.05	3.38	3.15	2.61	5.46	2.68	2.67	0.37	2.58	4.24	29.82
1896	0.85	1.23	0.88	2.35	4.40	2.18	8.01	3.90	9.44	1.71	1.01	0.81	36.77
1897	4.90	0.96	4.16	3.54	1.86	5.43	6.75	0.65	0.64	0.24	2.17	1.84	33.14
1898	3.13	1.16	5.98	4.80	6.70	4.77	3.06	6.92	8.07	3.99	1.52	1.38	51.48
1899	0.49	1.65	2.66	3.28	11.47	2.78	5.39	4.01	4.32	2.06	1.19	1.67	40.97
1900	2.46	3.24	1.43	2.10	4.56	1.06	2.20	4.21	5.02	5.36	1.72	0.25	33.61
1901	1.41	0.75	2.59	2.29	1.95	6.34	2.02	0.15	2.14	0.93	0.80	1.17	22.54
1902	0.44	1.02	2.24	3.13	3.63	7.59	4.87	6.93	1.82	2.38	2.60	2.21	38.86
1903	0.77	1.42	3.03	4.91	3.56	1.40	1.27	4.80	7.16	3.23	0.87	0.86	33.28
1904	2.70	0.70	3.46	5.11	3.94	3.62	4.48	4.63	8.33	0.30	0.21	1.45	38.93
1905	0.60	1.37	1.78	3.32	3.01	6.57	2.89	3.16	4.15	3.41	2.32	1.03	33.61
1906	2.40	2.50	2.82	2.16	1.83	1.48	1.46	2.87	2.94	0.73	1.92	1.90	25.01
1907	5.07	0.10	5.05	2.02	3.44	6.40	6.26	5.50	1.94	0.47	1.17	1.38	38.80
1908	0.51	2.86	1.76	1.82	10.09	4.32	3.70	2.50	2.22	0.87	3.05	0.58	34.28
Means	1.81	1.62	2.44	3.18	4.27	4.40	4.18	3.22	3.93	2.42	1.91	1.73	35.11

Section 65—Precipitation in Central Illinois.

Knoxville, Knox County, Ill.—Elevation, 775 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
†1861	.....	2.76	3.22	3.60	2.65	3.71	3.56	1.52	6.00	4.35	0.98	1.70	.....
1862	3.47	0.44	2.38	4.78	3.27	5.71	5.58	5.67	5.58	0.96	2.03	2.88	42.75
1863	2.85	2.66	1.80	.....	3.62	.....	0.74	1.80	1.85	4.74	0.34	2.41	.....
1864	1.23	0.57	3.11	4.02	1.80	4.08	3.40	2.22	2.16	2.60	2.96	4.55	32.73
1865	0.30	2.69	3.52	4.65	1.58	3.94	6.74	4.70	5.08	2.39	0.00	0.70	36.29
1866	2.75	0.98	1.87	2.52	1.14	0.88	4.64	4.82	8.38	2.00	0.41	1.58	31.97
1867	0.45	2.36	1.92	1.16	6.38	3.13	0.41	3.21	0.94	0.91	1.40	0.96	23.23
1868	0.30	0.50	5.40	5.74	6.74	1.22	1.79	3.51	5.28	.....	3.74	1.00	.....
1869	1.62	2.30	1.30	1.01	3.18	8.54	9.00	6.31	1.06	1.54	2.80	1.22	39.88
1870	0.63	0.30	3.86	0.60	1.35	1.27	1.10	3.70	3.96	4.46	0.60	1.08	22.91
1871	2.80	1.50	2.05	2.64	2.72	3.41	3.51	6.46	0.90	3.80	1.94	2.60	34.33
1872	.....	.....	1.70	2.25	2.34	4.80	.....	.....	.....	.....	.....	.....	.....
1873	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1874	.....	.....	.....	.....	.....	.....	.....	6.65	8.00	1.27	2.76	1.03	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
†1885	.....	.....	0.20	3.56	2.57	3.40	3.13	7.40	4.15	3.69	0.91	3.75	.....
1886	3.05	2.00	4.50	2.68	8.15	3.40	1.00	3.37	5.03	3.35	1.51	1.02	39.06
1887	3.20	6.55	1.25	1.55	3.60	3.00	6.60	3.95	.....	2.75	2.05	3.60	.....
1888	1.45	2.50	3.75	1.62	7.90	4.10	3.60	5.25	1.65	3.45	4.15	2.85	42.27
1889	1.73	1.30	1.35	4.30	3.90	4.13	2.00	0.50	2.35	1.65	3.20	1.90	28.31
*	*	*	*	*	*	*	*	*	*	*	*	*	*
†1895	1.85	0.39	1.45	3.61	3.62	1.40	8.81	2.54	6.10	1.00	3.51	5.13	39.41
1896	1.15	1.40	1.57	3.62	4.19	3.65	7.25	4.91	5.28	2.06	2.30	0.38	37.76
1897	6.32	0.98	5.67	4.18	1.20	2.38	4.45	1.01	2.05	0.20	2.47	1.47	32.38
1898	5.30	1.86	5.90	3.85	7.98	5.02	0.97	10.18	5.69	2.48	2.67	0.83	52.73
1899	0.42	1.74	3.01	1.55	6.87	2.00	2.71	1.14	2.95	2.48	1.42	2.64	28.93
1900	1.55	3.66	3.20	1.22	3.97	0.42	3.21	4.23	3.86	2.94	2.28	0.45	31.39
1901	1.11	1.07	2.55	1.14	1.25	3.17	2.51	0.65	2.40	0.91	1.15	0.89	18.80
1902	0.52	1.42	3.66	2.22	3.70	9.63	8.07	7.90	4.04	3.27	2.00	2.07	48.50
1903	1.10	1.72	2.95	5.62	4.57	2.43	1.53	6.40	2.45	2.20	1.08	0.98	33.03
1904	3.06	0.74	3.58	2.32	3.81	3.50	7.87	3.05	5.54	0.10	0.20	1.77	35.54
1905	1.07	1.13	1.96	5.38	3.38	4.26	4.59	4.37	2.08	2.69	2.30	1.78	34.99
1906	3.30	2.13	3.51	2.52	2.60	2.50	3.08	2.83	4.30	1.46	2.65	1.81	32.69
1907	.....	0.07	.....	0.29	0.29	.....	5.92	5.84	2.08	0.11	1.32	.....	.....
1908	0.99	4.39	2.78	2.19	9.55	2.53	4.10	3.81	1.39	1.38	3.24	1.36	37.71
Means	2.00	1.80	2.83	2.88	3.93	3.50	4.06	4.19	3.75	2.21	1.95	1.88	35.01

† Values from 1861 to 1874, inclusive, are for Galesburg; those from 1885 to 1889, inclusive, are for Oneida; and those for 1895 to 1908, inclusive, for Knoxville. Galesburg is 6 miles from Knoxville. Oneida is 12 miles from Knoxville.

Section 65—Precipitation in Central Illinois.

LaHarpe, Hancock County, Ill.—Elevation, 698 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
†1856	.....	.....	0.25	3.13	8.61	1.10	5.99	1.53	1.26	4.52	4.97	6.06	.....
1857	0.39	4.80	2.56	0.89	2.03	3.70	1.45	4.10	2.72	2.32	2.43	1.36	28.75
1858	2.05	1.52	3.17	7.22	9.51	5.86	7.93	2.33	2.46	3.01	3.11	2.88	51.05
1859	3.88	3.63	4.39	3.35	7.81	6.78	1.22	5.43	3.72	1.80	1.79	1.08	44.88
1860	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1861	1.68	2.94	3.63	3.96	3.89	4.99	1.37	1.57	4.27	2.31	0.41	1.49	32.47
1862	4.63	0.64	1.80	6.68	1.44	6.35	.....	.....	7.61	1.46	2.09	6.32	.....
1863	2.80	.....	2.21	.....	2.81	0.27	2.62	2.46	3.43	3.08	0.61	5.99	.....
1864	1.58	0.58	2.26	6.76	2.16	1.42	5.26	1.29	4.16	2.90	3.88	3.55	35.80
1865	0.15	2.81	4.02	5.77	0.69	6.77	9.58	1.69	5.81	3.34	0.12	1.25	42.00
1866	3.52	1.42	1.77	4.78	2.12	1.74	3.19	3.28	10.30	3.83	0.51	2.88	39.34
1867	1.85	2.53	1.68	2.00	4.98	3.65	3.70	1.86	1.78	0.99	1.33	1.30	27.65
1868	0.92	0.79	5.62	5.36	7.03	2.05	5.42	4.36	4.29	1.75	5.01	2.57	45.17
1869	2.16	2.56	0.95	4.48	5.18	8.13	7.77	6.57	1.82	2.19	3.42	2.07	47.30
1870	2.11	0.12	5.61	0.63	1.73	2.35	2.01	5.41	5.78	5.19	1.39	1.40	33.73
1871	4.49	1.59	3.85	3.05	2.60	4.70	2.81	6.48	1.55	5.62	2.76	1.31	40.81
1872	0.20	0.85	3.06	2.93	3.33	4.96	6.27	2.72	2.56	0.99	1.04	1.41	30.32
1873	3.93	1.24	0.84	7.41	3.74	1.41	6.23	0.46	5.32	3.85	1.57	7.63	43.63
1874	2.88	1.12	1.57	.....	2.00	6.61	3.42	4.95	2.18	0.98	2.22	1.07	.....
1875	0.32	2.00	2.83	1.76	6.09	5.59	14.01	1.30	6.64	2.35	0.52	3.89	47.43
1876	1.89	1.57	3.24	4.35	4.47	4.06	4.97	7.98	10.67	2.40	1.78	0.20	47.58
1877	0.82	0.14	4.62	2.58	3.96	6.96	6.24	3.08	3.27	9.27	2.89	4.00	47.83
1878	1.14	3.31	5.16	3.28	4.91	2.89	3.85	6.06	1.13	2.85	1.17	3.82	39.57
1879	0.73	0.79	1.91	1.26	1.63	3.02	3.15	5.20	2.06	0.19	3.97	1.51	25.42
1880	2.51	2.08	2.16	5.74	5.38	2.64	1.35	3.34	2.26	1.38	.....	.....	.....
1881	.....	5.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1895	.....	.....	.....	1.71	1.40	3.13	4.89	3.24	3.25	0.34	3.40	5.65	.....
1896	1.26	2.14	1.18	2.35	4.80	5.16	7.80	7.96	12.28	2.00	2.53	0.99	50.45
1897	10.38	1.83	6.22	5.85	2.41	5.80	3.87	1.86	1.39	0.26	1.26	2.10	43.23
1898	2.94	1.40	5.12	3.91	8.56	2.59	2.35	10.40	6.42	3.15	1.65	0.42	48.91
1899	0.35	1.38	3.14	3.17	12.57	2.60	2.58	4.32	2.82	1.97	1.52	1.17	37.59
1900	2.15	4.26	1.55	1.52	3.50	0.53	3.06	2.85	2.90	4.70	1.38	0.25	28.65
1901	1.17	1.65	2.24	1.30	2.10	5.10	5.15	0.50	2.07	0.85	1.08	0.69	23.90
1902	0.65	1.30	3.40	2.95	3.00	9.70	6.75	9.05	2.50	2.65	2.90	2.04	46.89
1903	2.07	2.13	1.92	5.30	3.00	2.20	1.45	5.00	7.65	4.05	1.02	0.88	36.67
1904	5.48	0.90	5.17	2.85	4.60	4.00	6.45	4.20	8.15	0.45	0.50	1.92	44.67
1905	1.13	1.99	1.25	4.47	4.55	12.60	2.40	5.55	1.65	2.80	2.10	1.14	41.63
1906	3.35	2.50	4.19	1.70	3.70	3.35	4.25	2.15	4.10	1.00	1.15	2.20	33.64
1907	7.62	0.30	6.40	2.60	2.75	4.45	6.70	5.10	1.95	0.30	0.90	1.26	40.33
1908	2.45	3.10	2.27	1.64	11.25	5.60	2.40	1.24	2.03	0.70	2.34	0.60	35.62
Means	2.43	1.92	3.06	3.57	4.38	4.32	4.47	3.97	4.11	2.47	1.97	2.33	39.00

† Values from 1856 to 1881, inclusive, are for Augusta. All other values are for LaHarpe. The stations are 24 miles apart.

Section 65—Precipitation in Central Illinois.

Lincoln, Logan County, Ill.—Elevation, 482 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1888	1.40	1.45	3.41	1.51	8.16	2.46	3.75	2.85	1.60	2.51	2.61	2.37	34.08
1889	1.72	1.88	1.61	0.95	4.19	7.07	4.71	0.30	4.81	1.70	4.10	1.50	34.54
1890	4.35	1.36	1.99	2.71	2.56	3.70	2.50	2.90	0.80	2.90	1.10	0.20	27.07
1891	1.69	4.51	3.20	3.46	1.05	3.36	3.25	6.06	0.15	0.73	4.52	1.43	33.41
1892	1.45	1.86	1.58	.....	.....	5.93	.....	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	.....	.....	3.41	2.05	0.35	2.25	1.11	1.64	1.30	.....
1894	2.79	2.62	3.23	2.60	2.88	1.91	3.27	1.51	4.06	0.81	1.50	2.43	29.61
1895	1.25	1.14	2.01	1.60	1.32	2.84	4.30	1.47	3.75	0.31	2.67	7.42	30.08
1896	1.32	2.22	1.14	2.31	2.89	4.74	8.14	1.95	5.06	0.43	1.95	0.51	32.66
1897	5.19	1.50	3.82	2.98	1.47	4.17	3.10	1.42	1.21	0.37	3.84	2.35	31.42
1898	4.78	2.20	9.90	2.47	5.04	3.71	0.56	2.77	5.14	4.79	2.26	1.50	45.12
1899	1.21	2.13	2.86	0.72	9.83	1.49	2.30	3.35	2.11	3.04	1.97	1.93	32.94
1900	0.31	5.27	1.22	1.19	2.66	3.96	5.76	6.88	4.24	2.96	4.04	0.68	39.17
1901	1.96	1.36	3.68	1.36	2.24	7.76	1.67	1.17	2.60	1.98	1.07	2.47	29.32
1902	0.67	1.40	4.15	3.34	1.33	8.46	3.34	5.64	4.13	2.24	2.62	2.21	39.53
1903	1.18	3.06	1.42	5.10	4.09	1.98	2.24	3.13	3.07	3.67	1.19	1.70	31.83
1904	2.74	1.00	5.53	5.61	2.81	3.44	2.22	4.32	8.73	0.50	0.02	1.03	37.95
1905	2.06	1.37	1.53	3.99	3.23	2.11	3.64	1.41	3.33	2.80	1.34	1.74	28.55
1906	.....	2.10	2.90	2.45	2.30	2.12	0.61	2.72	3.72	1.11	3.58	3.26	.....
1907	5.99	0.24	.....	2.52	5.54	3.30	3.57	8.50	2.63	1.28	2.01	3.82	.....
1908	1.37	4.33	.....	4.95	8.77	1.64	1.96	2.77	.....	0.49	1.44	1.69	.....
Means	2.29	2.15	3.07	2.73	3.81	3.79	3.15	3.07	3.34	1.79	2.27	2.08	33.54

Values for 1888 to 1892, inclusive, are for Beason, 8 miles from Lincoln; values for 1893 to 1905, inclusive, are for Mt. Pulaski, 10 miles from Lincoln; values for 1906 to 1908, inclusive, are for Lincoln.

Section 65—Precipitation in Central Illinois.

Martinsville, Clark County, Ill.—Elevation, 630 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1887	1.85	5.20	4.45	3.16	5.65	1.39	2.51	3.59	2.35	1.02	5.25	3.00	39.45
1888	.....	4.25	2.22	2.75	.....	5.26	.....	6.71	1.36	1.13	7.30	.....	.....
1889	1.01	1.08	0.99	0.27	4.20	7.65	3.00	1.30	5.00	3.34	4.67	0.91	33.42
1890	6.19	5.98	3.34	3.46	3.57	3.68	3.00	4.24	1.60	1.45	2.25	1.34	43.10
1891	2.23	4.67	3.93	1.35	0.72	1.55	0.79	6.55	1.42	1.09	3.61	0.99	28.60
1892	1.60	1.80	.....	7.84	6.83	2.65	2.62	3.27	0.77	0.83	3.20	1.12	.....
1893	1.25	1.42	3.99	9.16	4.76	3.15	0.85	0.54	4.18	1.30	3.14	2.11	38.85
1894	2.13	2.83	2.20	3.72	4.37	1.10	3.44	3.45	1.70	1.20	0.98	3.49	30.91
1895	2.56	0.95	1.20	3.43	1.10	1.54	4.71	3.83	2.48	0.95	4.75	4.30	31.80
1896	0.85	1.80	1.90	1.92	3.37	3.23	10.57	2.83	4.30	0.95	3.27	1.41	36.40
1897	4.15	2.50	7.27	5.72	3.47	6.77	2.30	0.25	0.47	0.69	6.01	2.83	42.43
1898	3.86	1.26	9.64	2.48	2.79	4.20	1.15	3.44	4.90	4.35	2.29	0.85	41.21
1899	1.80	1.38	4.05	1.20	5.20	2.25	4.51	2.70	0.69	2.79	1.79	2.55	30.91
1900	0.23	†2.66	†1.56	†0.75	†1.58	†5.07	†5.53	†3.37	†4.23	†2.15	†2.96	†0.72	33.81
1901	†0.57	†0.80	†1.28	.....	.....	†6.41	†0.43	†1.56	†0.42	†2.40	†1.10	†3.93	.....
1902	.....	.....	†1.97	2.49	2.87	6.48	4.28	4.57	3.78	1.39	.....	.....	.....
1903	.....	.....	.....	3.81	0.85	2.54	4.06	4.50	2.93	2.28	1.55	.....	.....
1904	3.57	0.55	7.97	0.95	3.55	4.61	3.20	2.25	5.01	0.60	0.25	.....	.....
1905	1.81	.....	1.52	4.01	5.41	1.55	5.64	.....	2.00	4.99	2.70	1.75	.....
1906	3.85	1.55	3.55	2.40	1.65	5.07	2.74	5.43	3.65	0.80	4.65	4.70	40.04
1907	7.57	0.69	1.90	2.45	5.08	4.86	4.98	3.85	0.40	2.65	3.40	2.20	39.43
1908	0.20	3.25	3.90	3.60	11.35	3.17	2.67	1.44	1.87	0.21	3.72	1.23	36.31
Means	2.50	2.32	3.44	3.19	4.07	3.83	3.43	3.30	2.60	1.75	3.28	2.19	35.90

† At Weir, 7 miles distant.
At Melrose, 10 miles distant.

Section 65—Precipitation in Central Illinois.

Martinton, Iroquois County, Ill.—Elevation, 633 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
†1885	.....	.....	.....	.....	.....	3.10	3.75	2.11	4.45	6.65	1.36	4.02	.....
†1886	2.06	1.78	2.04	2.33	5.38	3.40	3.06	3.75	5.23	0.62	1.49	1.42	32.56
†1887	1.21	5.03	1.02	2.17	1.95	2.05	2.12	3.37	2.74	1.65	2.90	4.11	30.32
†1888	2.82	1.50	2.53	2.11	4.96	4.43	2.49	0.61	0.50	2.36	3.20	1.92	29.43
†1889	1.39	1.70	1.65	1.28	6.40	5.65	6.54	2.01	2.71	2.68	3.15	1.53	36.69
†1890	4.79	1.77	3.28	3.86	5.37	5.78	1.57	2.70	2.08	3.73	1.56	.....	.....
†1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
†1892	.....	.....	2.27	7.33	9.47	3.98	1.35	2.42	2.51	0.52	1.95	1.44	.....
†1893	1.85	6.70	3.15	6.95	5.42	1.35	.....	.....	.....	.....	.....	.....	.....
*1894	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.78	1.73	.....
*1895	0.87	T	0.53	3.03	1.35	1.29	5.09	1.93	3.46	1.17	2.80	7.91	29.43
1896	*1.30	*1.94	*0.89	.....	3.25	4.42	7.02	3.62	5.50	0.25	1.98	0.13	.....
1897	3.61	1.37	3.96	2.26	1.78	4.44	1.67	1.28	0.29	0.61	5.71	2.20	29.18
1898	3.44	1.90	4.38	1.98	5.66	2.65	1.11	4.03	5.77	4.36	2.81	1.80	39.89
1899	1.37	0.89	2.14	0.29	4.02	2.22	2.55	2.19	2.30	3.17	1.84	3.11	26.00
1900	0.74	4.56	3.52	1.31	4.22	2.33	4.34	5.10	2.09	1.82	5.78	0.52	36.33
1901	1.55	1.30	4.06	1.37	2.19	4.76	1.85	3.15	1.82	2.90	1.10	3.10	29.15
1902	0.83	1.81	4.14	3.36	4.51	12.53	6.29	2.37	6.84	1.72	3.37	2.91	50.68
1903	1.29	2.00	1.28	7.18	4.67	3.33	4.34	3.88	2.40	2.54	0.79	0.29	33.99
1904	2.02	1.60	4.08	3.26	3.92	1.68	2.03	3.24	4.81	1.23	0.09	1.85	29.81
1905	0.81	2.05	1.79	3.96	8.93	4.38	2.68	4.91	2.77	2.10	2.68	1.60	38.66
1906	3.26	1.77	3.54	2.03	4.25	3.17	6.02	7.19	4.59	1.80	3.25	3.40	44.27
1907	4.57	0.20	5.23	2.56	2.86	4.04	5.65	6.62	4.17	0.65	2.70	4.68	43.93
1908	1.75	4.05	2.79	4.30	9.95	1.65	1.24	2.86	2.60	0.67	1.58	2.08	35.52
Means	2.08	2.20	2.78	3.14	4.79	3.76	3.46	3.30	3.32	2.06	2.43	2.46	35.78

† Values for 1885 to 1893, inclusive, are from Watseka, 9 miles distant.
* Values November, 1894, to March, 1896, inclusive, are for Gilman, 16 miles distant.

Section 65—Precipitation in Central Illinois.

Minonk, Woodford County, Ill.—Elevation, 745 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1885	1.70	0.46	2.95	3.20	4.22	3.45	0.60	0.65	4.95	1.60	0.70	1.05	25.53
1887	0.85	4.95	0.75	1.50	2.10	0.25	0.92	2.60	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1895	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.87	4.03	6.33	.....
1896	1.26	1.44	1.08	3.64	5.50	3.87	5.33	2.67	4.53	0.20	2.32	T	31.84
1897	5.14	1.45	3.18	2.93	1.05	2.57	2.93	0.92	1.90	0.13	3.92	1.20	27.32
1898	4.21	1.78	5.00	2.87	6.84	2.92	0.58	4.76	5.47	3.86	2.13	1.04	41.46
1899	0.50	1.79	2.24	1.58	4.59	3.75	2.19	1.74	4.20	3.47	0.95	2.31	29.31
1900	1.30	4.45	3.02	1.16	3.09	1.40	2.21	6.43	2.54	2.24	2.66	0.37	30.87
1901	1.19	1.31	3.60	0.61	2.41	2.50	2.40	0.75	1.92	0.75	0.78	1.87	20.39
1902	0.48	1.41	3.89	2.23	2.43	9.11	7.76	8.56	4.59	1.59	3.15	1.79	47.29
1903	0.71	2.16	2.80	4.65	3.23	4.12	6.24	4.49	7.14	2.23	0.92	1.47	40.16
1904	2.51	1.48	3.95	2.75	3.70	1.61	6.23	2.69	4.14	0.17	T	1.43	30.66
1905	1.16	1.06	1.97	3.88	4.54	3.35	2.07	2.59	2.64	2.10	1.68	1.42	28.46
1906	1.89	1.43	1.95	0.92	1.62	2.46	1.66	2.51	4.37	1.50	2.04	1.99	24.34
1907	3.99	0.06	1.72	2.59	4.14	4.19	5.72	3.91	3.82	0.44	1.89	2.46	34.93
1908	0.89	3.83	2.42	4.06	8.77	1.21	1.88	1.62	0.39	0.69	1.60	0.67	27.94
Means	1.87	1.94	2.72	2.57	3.88	3.14	3.25	3.19	3.76	1.46	1.92	1.69	31.39

Section 65—Precipitation in Central Illinois.

Monmouth, Warren County, Ill.—Elevation, 784 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1887	.....	.....	1.30	.....	.....	.....	5.20	.....	3.43	.....	1.30	.....	.....
1888	3.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1893	.....	2.24	3.48	.....	.....	.....	.....	.....	.....	.....	.....	1.57	.....
1894	1.78	1.35	2.22	2.10	2.10	2.04	1.02	2.00	5.61	1.16	1.52	1.49	24.39
1895	1.42	0.18	0.84	2.54	2.04	2.97	5.50	3.04	4.26	0.78	2.06	4.81	30.44
1896	1.10	1.35	0.68	4.50	4.76	3.56	5.79	6.68	6.02	1.76	0.81	0.35	37.36
1897	5.14	0.82	2.63	3.25	0.94	2.00	5.26	0.65	2.78	0.13	1.87	1.69	27.16
1898	3.20	1.38	3.65	2.73	6.60	4.67	1.50	9.23	7.15	2.34	1.53	0.47	44.45
1899	0.37	1.49	3.10	2.84	6.61	1.24	1.49	3.27	2.26	2.38	0.65	1.43	27.13
1900	1.67	2.92	2.10	1.01	2.93	0.82	2.65	4.23	5.31	2.86	2.39	0.25	29.14
1901	1.24	1.19	2.00	1.23	1.28	4.96	5.44	0.37	3.00	1.03	0.87	0.78	23.39
1902	0.30	0.99	3.03	3.13	3.65	13.97	7.51	8.80	3.48	3.39	2.28	2.56	53.09
1903	0.63	1.66	2.11	6.58	3.63	2.27	1.92	6.32	6.57	2.35	0.72	0.66	35.42
1904	2.85	0.80	3.62	2.51	4.61	2.86	8.66	5.63	4.29	0.36	0.22	1.67	38.08
1905	0.83	2.04	1.77	4.98	3.64	3.87	2.89	2.04	1.19	1.56	2.16	1.40	28.37
1906	3.29	2.12	3.77	2.28	3.11	1.14	2.73	1.98	8.98	2.30	2.67	1.76	39.13
1907	4.72	0.27	2.02	3.19	2.79	2.72	7.32	5.27	1.76	0.74	1.46	1.49	33.75
1908	1.27	3.33	3.08	2.41	11.29	5.21	5.12	3.98	1.56	1.40	3.08	0.87	42.60
Means	2.05	1.51	2.44	3.02	3.93	3.82	4.38	4.23	4.23	1.64	1.60	1.45	34.30

Section 65—Precipitation in Central Illinois.

Pana, Christian County, Ill.—Elevation, 692 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1882	.....	.....	.....	.....	.....	.....	.....	3.68	0.15	2.00	2.75	1.50	.....
1883	1.28	4.50	1.00	2.00	4.31	3.15	5.75	1.50	0.75	8.00	3.72	0.82	36.78
1884	1.06	4.00	1.50	2.58	2.25	3.49	4.00	1.25	7.33	2.50	2.00	4.88	36.84
1885	2.60	0.88	0.18	5.11	5.41	10.50	6.61	3.59	7.00	5.33	1.33	1.65	50.19
1886	1.68	2.35	2.28	3.07	5.50	5.58	1.50	7.16	8.74	0.16	3.39	1.67	43.08
1887	0.65	6.08	3.41	5.68	6.50	1.66	3.05	5.35	5.08	1.33	7.58	6.41	52.78
1888	3.08	3.74	6.08	3.50	6.08	8.74	5.73	6.66	1.66	5.83	6.25	5.58	62.93
1889	2.73	2.05	3.25	1.25	6.83	4.68	2.24	0.08	4.57	2.75	8.16	4.33	42.92
1890	11.65	2.01	6.08	3.04	3.57	5.25	3.33	3.66	4.66	1.16	3.50	1.12	49.03
1891	0.56	2.64	4.32	4.16	0.66	6.25	12.10	6.50	1.00	2.26	10.09	1.79	42.33
1892	2.11	5.61	3.32	11.99	8.57	2.76	6.49	6.07	3.25	1.57	7.25	4.33	63.32
1893	0.48	4.60	3.77	.....	1.60	2.99	2.49	0.30	2.74	0.28	.....	.....	.....
1894	...	...	...	...	...	...	...	...	...	...	...	...	...
*1895	.....	.....	.....	.....	.....	.....	.....	1.50	3.25	0.25	3.28	4.68	.....
*1896	0.43	1.41	1.25	1.98	5.04	3.65	5.98	3.07	4.44	1.19	2.59	0.44	31.47
*1897	3.35	1.20	6.02	5.27	4.09	4.99	3.60	1.36	0.29	0.42	5.29	2.78	38.36
*1898	5.02	2.74	6.72	2.92	6.49	2.31	2.34	3.17	3.90	4.85	2.18	1.33	44.27
1899	2.00	1.91	3.44	1.38	6.84	4.01	1.44	2.44	1.35	3.97	1.72	3.00	33.50
1900	0.51	5.31	1.66	1.32	2.30	6.17	5.49	1.98	3.36	2.00	3.63	1.21	34.94
1901	1.64	1.92	3.71	2.19	3.61	3.94	1.08	2.66	1.73	2.64	1.70	3.16	29.98
1902	1.47	0.96	3.83	2.94	1.71	10.43	1.48	5.51	4.01	2.32	3.16	3.68	41.50
1903	1.43	4.15	2.84	3.66	1.95	3.25	3.53	4.83	2.41	2.24	0.42	1.99	32.70
1904	2.85	1.19	7.86	4.48	2.00	3.50	6.39	4.20	4.26	0.54	0.10	1.34	38.71
1905	2.16	1.17	1.49	2.31	3.65	2.29	6.88	1.66	2.32	5.45	1.95	2.27	33.60
1906	2.78	2.33	4.75	3.94	2.46	3.87	0.89	3.18	7.18	1.03	4.86	2.99	40.26
1907	6.18	0.66	2.61	3.02	3.78	4.85	5.93	5.91	1.01	1.95	1.95	3.97	41.82
1908	1.97	5.87	2.37	5.42	10.21	2.38	2.48	1.60	1.05	0.13	3.09	1.55	38.12
Means	2.49	2.89	3.49	3.62	4.39	4.21	3.78	3.42	3.37	2.38	3.69	2.74	40.50

† Interpolated from surrounding stations.
* From August, 1895, to April, 1898, values are for Morrisonville, 19 miles distant.

Section 65—Precipitation in Central Illinois.

Paris, Edgar County, Ill.—Elevation, 600 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1887	1.40	4.19	2.40	2.78	5.03	0.34	0.81	3.40	3.74	0.72	6.47	4.39	35.67
1888	2.75	2.10	3.52	2.52	4.35	4.62	2.94	4.09	2.44	2.66	4.78	2.32	39.09
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1892	.....	1.31	0.09	7.50	10.70	4.50	3.50	.....	.....	.....	.....	.....	.....
1893	.....	.....	.....	6.26	4.70	4.24	1.19	0.38	3.24	1.41	3.10	1.69	.....
1894	2.95	2.64	3.80	2.17	3.31	1.78	1.74	2.00	3.78	0.69	3.45	1.51	29.82
1895	1.71	1.12	0.91	3.87	0.88	2.21	2.95	1.65	2.46	0.28	4.84	3.05	25.93
1896	.....	.....	.....	1.28	5.92	5.45	8.39	5.41	5.94	.....	1.96	.....	.....
1897	.....	.....	2.99	4.63	2.04	5.60	2.70	0.53	0.38	0.25	6.41	2.93	.....
1898	4.29	1.69	8.34	2.41	3.05	3.84	1.67	3.31	4.71	3.73	2.30	1.37	40.71
1899	2.97	2.22	2.73	0.90	4.90	2.04	3.99	3.09	0.92	†3.92	3.59	2.83	34.10
1900	0.80	†5.31	1.63	2.05	2.17	6.37	4.35	4.75	3.13	4.04	3.64	0.98	39.22
1901	1.48	1.65	3.87	2.82	2.78	7.43	2.07	2.53	1.56	3.61	2.19	3.54	35.53
1902	0.87	1.20	2.93	1.56	4.97	9.04	4.26	4.71	3.31	2.11	4.22	3.89	43.07
1903	1.10	2.45	2.73	4.54	1.21	1.10	3.43	3.48	0.71	2 24	0.56	0.29	23.84
1904	1.25	.....	.....	2.97	3.58	2.32	1.57	3.20	4.64	1.01	0.30	2.26	.....
1905	1.26	2.03	1.98	3.75	4.91	0.45	5.31	3.43	4.36	3.73	2.39	2.42	36.02
1906	4.99	0.65	5.30	1.57	1.03	2.54	2.95	3.27	3.93	0.42	3.80	3.29	33.74
1907	5.26	0.07	3.05	2.50	2.53	.....	.....	.....	0.70	2.79	3.47	3.10	.....
1908	1.53	5.11	4.64	5.57	9.27	2.48	2.75	0.80	1.79	0.20	3.05	1.12	38.31
Means	2.31	2.25	3.18	3.24	4.07	3.69	3.15	2.94	2.87	1.99	3.36	2.41	35.46

† Interpolated.

Section 65—Precipitation in Central Illinois.

Peoria, Peoria County, Ill.—Elevation, 609 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1855	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.76	.....
1856	0.80	1.03	0.25	1.72	4.03	1.50	2.83	1.39	0.76	1.66	4.00	6.13	26.10
1857	0.37	5.33	3.84	1.39	2.80	2.77	1.40	5.61	2.16	2.01	1.33	1.80	30.51
1858	1.48	1.95	3.28	6.25	10.64	5.95	5.75	3.24	2.96	3.24	4.85	3.67	53.26
1859	1.50	1.42	5.82	2.60	3.17	2.18	0.67	4.14	2.84	2.15	2.40	1.23	30.12
1860	1.86	2.40	1.13	1.64	2.00	4.95	8.87	2.39	2.00	0.70	3.13	3.08	34.15
1861	1.25	2.46	3.96	4.95	2.19	2.31	2.31	2.78	3.72	2.33	1.09	0.94	30.29
1862	4.27	0.70	2.71	5.03	1.46	3.67	7.74	9.04	5.09	1.61	1.81	5.20	48.33
1863	2.83	3.20	2.61	1.52	2.97	0.45	4.82	2.24	2.51	3.92	0.71	4.49	32.27
1864	1.42	0.41	2.20	4.81	1.88	2.55	2.92	1.56	4.81	1.53	3.82	3.06	30.97
1865	0.22	4.01	3.57	4.27	2.34	1.86	5.77	3.61	8.31	1.67	0.31	1.08	37.02
1866	3.21	1.10	2.54	2.65	2.57	2.61	5.17	3.97	6.50	2.87	0.51	2.05	35.75
1867	1.36	2.88	1.74	1.57	4.40	2.92	2.65	2.26	0.60	1.10	1.93	1.21	24.62
1868	0.77	0.75	5.38	3.18	7.85	1.43	1.47	2.74	4.46	1.41	4.50	1.81	35.75
1869	0.99	2.62	1.71	3.59	6.09	8.35	7.35	3.39	0.74	1.53	3.13	2.63	42.12
1870	2.05	0.33	4.37	0.45	1.62	0.75	0.68	3.26	3.56	4.27	1.21	1.02	23.57
1871	2.45	1.62	3.24	2.58	1.93	3.47	3.76	4.95	0.65	3.37	2.09	2.04	32.15
1872	0.20	0.69	2.50	2.95	2.38	9.76	7.80	4.54	4.13	0.80	2.00	1.07	38.82
1873	3.47	1.29	1.30	4.76	4.78	2.96	4.25	1.25	3.65	2.26	1.46	7.15	38.58
1874	3.04	1.45	1.11	2.90	2.51	1.95	1.46	5.60	1.15	1.00	2.20	0.67	25.04
1875	0.32	2.20	2.05	2.00	4.23	3.00	8.28	1.02	9.63	3.46	0.71	2.39	39.29
1876	2.60	2.00	4.40	2.66	3.94	6.17	5.54	3.14	4.51	4.86	2.63	0.28	43.03
1877	0.92	0.06	3.32	2.86	2.57	9.43	3.01	2.04	2.82	5.68	3.65	3.45	39.82
1879	0.50	2.25	2.10	3.75	4.45	3.49	2.58	4.42	0.97	3.96	0.91	2.08	31.46
1879	1.05	0.97	1.80	2.95	0.93	3.23	3.42	1.88	3.72	2.17	4.93	1.92	28.97
1880	3.38	3.95	3.30	5.94	6.73	2.32	3.17	3.38	3.09	1.75	1.92	0.96	39.89
1881	0.52	3.51	3.52	1.62	3.50	7.20	2.43	1.38	4.05	5.56	4.26	3.50	41.05
1882	1.27	3.21	3.12	2.41	6.31	11.18	2.91	1.92	1.53	3.76	2.08	1.76	41.49
1883	1.31	4.14	0.77	6.18	6.54	4.39	3.57	0.57	2.93	3.57	4.19	1.37	39.53
1884	0.70	3.18	2.17	2.62	5.50	3.87	3.67	4.13	5.76	4.80	2.19	3.21	41.80
1885	2.63	0.87	0.24	4.44	1.70	4.07	4.73	2.64	5.28	2.32	1.04	2.44	32.40
1886	2.41	1.86	2.25	2.75	2.90	3.67	0.47	3.57	4.68	1.81	1.34	0.89	28.60
1887	1.10	5.45	0.94	1.53	1.24	1.53	2.85	2.72	2.53	2.14	1.62	3.65	27.30
1888	1.87	1.66	4.03	1.18	6.72	1.81	6.48	2.30	4.79	2.29	2.67	2.39	38.22
1889	1.70	0.84	1.50	2.79	3.92	6.30	7.64	1.23	2.61	2.28	2.91	1.33	35.05
1890	2.80	1.36	2.73	2.33	2.74	2.42	0.72	2.39	2.12	3.45	1.79	0.41	25.26
1891	1.68	1.90	2.68	3.64	1.97	3.31	2.82	5.71	2.00	0.71	4.08	2.39	32.89
1892	1.25	1.84	2.45	4.54	7.70	6.05	3.08	0.73	2.35	1.20	2.72	1.75	35.66
1893	0.87	2.92	3.01	7.86	4.65	1.82	2.48	0.44	3.02	0.70	2.21	1.74	31.72
1894	2.60	1.48	3.06	2.22	3.58	4.18	1.00	2.50	4.42	1.45	2.92	1.58	30.99
1895	1.32	0.37	1.02	2.89	1.84	1.67	8.72	2.27	4.92	0.67	4.17	5.86	35.72
1896	1.30	1.95	1.05	4.47	5.74	2.23	7.02	4.69	4.86	0.23	2.20	0.40	36.14
1897	5.39	1.19	4.70	2.87	1.29	2.11	4.65	1.02	0.93	0.04	3.48	1.16	28.83
1898	4.08	2.59	5.74	3.02	5.54	3.37	0.47	3.26	6.05	3.00	2.03	0.93	40.08
1899	0.72	1.96	2.97	1.36	6.03	2.60	1.69	1.27	5.24	2.78	2.25	2.12	30.99
1900	1.92	5.64	1.42	1.09	5.54	1.44	2.45	5.39	2.91	2.90	1.87	0.39	32.99
1901	1.98	1.24	4.31	0.81	1.50	4.32	3.97	1.29	2.64	0.90	0.80	2.26	26.02
1902	0.67	1.41	2.71	2.29	2.99	9.60	7.30	7.42	6.78	3.78	2.83	1.54	49.32
1903	0.89	1.70	3.66	5.15	4.22	2.30	4.91	7.22	5.78	2.13	0.85	0.95	39.85
1904	1.87	1.29	4.42	3.48	4.06	2.44	5.58	4.13	6.67	0.10	0.12	1.33	35.49
1905	1.15	1.45	2.00	3.99	4.53	5.13	4.24	1.36	1.78	2.77	2.45	1.60	32.45
1906	1.70	1.85	2.55	2.77	2.88	3.24	2.48	1.59	4.92	1.00	2.42	1.65	29.05
1907	5.39	0.14	2.34	2.82	2.08	3.99	4.89	6.60	2.04	0.35	1.68	1.66	34.88
1908	0.59	3.98	2.50	4.08	7.76	1.09	3.91	2.78	0.82	0.71	1.89	0.82	33.96
Means	1.77	2.01	2.72	3.14	3.88	3.78	3.98	3.11	3.60	2.24	2.31	2.15	34.75

Section 65—Precipitation in Central Illinois.

Philo, Champaign County, Ill.—Elevation, 700 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1885	.....	.....	.....	.....	3.57	5.12	3.34	2.12	4.32	4.41	.....	.....	.....
1886	2.28	0.71	3.90	2.55	3.36	5.33	3.25	3.36	7.75	0.40	2.80	1.58	37.27
1887	0.81	2.94	2.62	3.37	5.00	1.50	0.98	2.77	4.26	0.81	2.96	4.05	32.07
1888	2.67	2.05	2.77	2.62	6.68	5.11	8.86	0.35	1.18	4.50	4.41	2.12	43.32
1889	1.23	2.19	1.36	1.04	5.88	11.16	4.47	0.84	2.64	3.21	3.48	2.04	39.54
1890	6.35	3.47	2.35	3.96	3.84	5.14	2.02	1.81	1.50	2.22	2.36	0.13	35.14
1891	0.89	2.10	4.32	2.46	1.14	3.15	1.52	4.21	0.59	0.82	6.14	1.55	28.89
1892	1.69	3.71	2.21	7.79	7.43	2.81	3.10	4.29	1.16	0.50	4.92	1.80	41.41
1893	1.02	4.51	3.87	8.28	6.38	1.67	0.66	0.46	3.65	0.65	3.48	1.28	35.91
1894	2.38	3.28	3.04	3.63	2.20	4.44	2.53	1.22	5.02	0.76	2.13	2.19	32.82
1895	1.08	1.28	1.08	2.38	0.82	2.73	3.01	1.28	3.72	0.85	3.24	4.99	26.46
1896	1.06	1.57	0.77	1.38	3.99	3.45	7.27	6.41	5.02	0.20	3.41	0.83	35.36
1897	4.25	1.56	3.68	3.48	1.97	6.22	3.48	1.20	0.45	0.54	5.08	2.65	34.56
1898	3.62	1.28	8.71	2.84	4.93	3.78	1.98	2.29	5.23	5.55	3.20	2.23	45.64
1899	2.50	2.31	2.31	0.87	4.14	2.60	1.82	2.93	0.50	4.22	2.16	2.56	29.22
1900	0.16	1.13	1.89	0.82	6.19	4.55	6.35	6.88	1.64	2.26	3.56	1.34	39.77
1901	2.01	1.99	3.11	1.80	2.66	5.72	3.73	2.44	1.19	3.57	1.36	3.75	33.33
1902	1.02	1.56	3.18	1.47	2.23	7.38	5.59	5.39	4.06	3.39	3.23	3.12	41.62
1903	1.45	3.16	1.45	5.50	2.32	3.36	3.49	2.39	1.77	2.87	2.04	2.20	32.00
1904	3.17	1.25	6.57	4.06	3.05	2.71	2.17	5.65	3.17	0.53	0.35	0.76	33.44
1905	2.18	1.68	1.10	3.79	4.62	3.54	6.00	1.31	4.79	3.11	1.01	1.87	35.00
1906	2.55	1.86	4.38	1.65	4.37	2.48	4.87	2.20	3.80	1.74	4.75	3.93	38.58
1907	7.60	0.16	4.22	2.42	3.43	5.98	6.08	4.03	0.58	2.18	2.27	3.46	42.41
1908	1.79	4.25	3.37	4.17	7.65	1.79	2.64	2.42	1.59	0.35	3.27	1.32	34.61
Means	2.34	2.30	3.14	3.14	4.09	3.82	3.72	2.84	2.90	2.07	3.13	2.25	35.74

Section 65—Precipitation in Central Illinois.

Pontiac, Livingston County, Ill.—Elevation, 546 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1903	0.80	3.23	2.54	4.94	4.36	1.39	6.35	2.60	3.62	2.76	1.06	1.98	35.63
1904	3.92	1.84	5.73	3.63	2.67	1.95	5.37	2.45	5.79	0.17	0.06	2.14	35.72
1905	1.80	1.89	2.17	3.45	6.33	1.70	1.78	1.82	2.26	2.53	2.26	1.71	29.70
1906	3.07	1.78	3.28	2.18	1.77	2.35	2.39	0.80	3.56	1.61	2.58	2.62	27.99
1907	5.62	0.15	2.74	3.09	3.28	3.00	5.66	4.47	4.59	0.61	2.04	3.05	38.30
1908	1.01	4.52	2.90	4.83	8.72	1.65	2.35	1.25	1.53	0.92	2.61	1.51	33.80
Means	2.70	2.24	3.23	3.69	4.52	2.01	4.15	2.23	3.56	1.43	1.77	2.17	33.70

Section 65—Precipitation in Central Illinois.

Rantoul, Champaign County, Ill.—Elevation, 768 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1891	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.01	1.19	.....
1892	0.96	2.41	2.28	6.04	8.17	4.38	3.51	1.56	0.93	0.62	4.56	1.39	36.81
1893	1.60	3.57	2.60	7.23	3.89	1.11	0.38	0.20	4.38	0.76	2.19	2.25	30.16
1894	1.91	1.77	2.75	3.58	4.39	2.37	0.41	2.45	5.21	0.39	1.58	1.16	27.97
1895	1.34	0.65	0.95	2.55	1.41	3.40	7.47	1.39	5.42	0.47	3.25	6.82	35.12
1896	0.86	1.38	0.87	1.68	4.95	4.08	6.86	3.83	5.73	0.22	2.25	0.30	33.01
1897	3.88	1.18	3.41	3.54	2.23	6.73	5.39	0.58	0.68	0.58	3.80	2.32	34.32
1898	3.46	1.76	7.20	2.04	5.94	4.99	1.87	3.87	3.86	4.58	3.28	1.98	44.83
1899	2.23	1.66	3.49	0.88	5.81	1.81	3.10	2.61	2.59	4.50	1.65	1.58	31.91
1900	0.18	2.48	2.72	0.92	4.69	7.31	5.96	5.91	5.53	2.32	2.82	0.93	41.77
1901	1.57	1.54	3.98	1.42	4.38	4.83	0.51	4.37	2.71	3.32	1.63	3.49	33.75
1902	0.77	1.90	3.09	2.72	3.29	13.54	5.69	6.09	4.73	2.85	2.37	2.96	50.00
1903	1.14	3.23	1.40	6.26	3.77	6.13	2.73	4.66	1.25	1.85	1.34	2.62	36.38
1904	3.95	1.38	6.78	4.62	3.29	1.11	6.60	3.16	3.39	0.76	0.10	1.25	36.39
1905	1.85	1.50	1.31	3.70	4.01	2.68	4.73	2.60	3.75	3.34	2.62	1.58	33.67
1906	3.47	1.50	4.09	2.23	2.51	2.30	3.49	5.75	4.74	2.00	4.91	3.08	40.07
1907	5.69	0.08	3.54	2.19	3.08	5.45	6.17	6.21	2.26	1.39	2.17	2.71	40.94
1908	1.49	4.66	3.00	4.83	10.66	1.71	2.17	1.89	1.13	0.38	2.70	1.66	36.58
Means	2.14	1.92	3.14	3.32	4.50	4.35	3.94	3.36	3.45	1.78	2.68	2.13	36.71

Section 65—Precipitation in Central Illinois.

Rushville, Schuyler County, Ill.—Elevation, 670 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1889	1.70	1.86	0.81	.....	.....	.....	.....	.....	.....	.....	3.79	1.20	.....
1890	2.99	1.63	2.49	2.33	3.42	3.92	4.19	2.14	3.64	1.19	2.06	0.25	30.35
1891	1.05	2.09	3.89	4.49	4.74	2.57	4.78	7.94	0.61	2.34	4.93	2.13	41.16
1892	2.07	2.90	2.49	7.68	7.58	2.60	5.95	0.60	3.18	1.27	1.53	2.09	39.94
1893	1.16	3.02	3.77	9.10	7.36	3.03	2.45	1.91	2.96	0.22	1.72	0.81	37.51
1894	2.70	2.40	2.41	3.11	2.17	4.21	0.67	2.06	8.32	1.12	2.92	1.70	34.09
1895	1.75	0.37	1.03	2.88	3.32	3.88	5.53	4.85	3.41	0.53	4.72	5.90	38.20
1896	1.56	1.72	0.78	4.45	4.31	3.72	9.61	1.77	5.85	1.59	1.45	0.67	37.38
1897	6.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
†1898	.....	.....	.....	.....	.....	.....	.....	.....	6.68	2.22	2.47	0.97	.....
1899	0.89	1.99	2.75	1.14	8.38	2.58	4.25	3.00	4.26	3.43	1.96	2.02	36.65
1900	2.10	5.42	0.96	†1.09	2.72	1.30	1.82	3.89	†3.53	3.76	1.48	0.39	28.46
1901	2.50	1.21	3.37	1.89	0.69	†3.86	2.65	0.70	2.63	†0.71	1.07	1.75	23.03
1902	0.67	1.17	4.67	2.76	2.72	8.31	4.38	6.45	1.32	2.86	2.00	2.67	43.31
1903	1.08	1.50	2.45	5.63	4.11	2.26	3.13	4.26	3.99	1.98	0.97	0.95	32.61
1904	3.07	0.69	5.05	6.60	4.63	4.11	4.39	3.25	3.87	0.22	0.03	2.09	38.00
1905	0.51	1.07	1.75	3.53	3.23	5.33	2.83	3.02	5.39	3.11	1.03	1.72	32.52
1906	1.75	1.90	3.49	3.30	1.73	3.84	2.52	3.83	4.82	0.52	2.21	2.50	32.14
1907	5.86	0.25	2.83	3.99	3.66	1.26	6.82	5.94	0.89	0.81	1.30	2.00	38.64
1908	1.30	3.60	0.73	4.51	7.07	1.88	3.81	2.64	1.29	0.40	3.05	0.95	34.23
Means	2.14	1.94	2.52	4.03	4.26	3.81	4.10	3.43	3.87	1.59	2.14	1.72	35.55

† Values from September to December, 1898; all of year 1899; from April to September, inclusive, 1900 and June to October, inclusive, 1901, are for Astoria, 13 miles distant.

Section 65—Precipitation in Central Illinois.

Springfield, Sangamon County, Ill.—Elevation, 609 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1879.....	.....	.....	.....	.....	.....	.....	1.52	3.82	0.84	1.25	5.12	2.88	.....
1880.....	2.70	2.89	2.37	3.23	5.76	2.47	1.82	1.80	3.15	2.04	1.60	1.10	30.93
1881.....	0.84	5.85	4.45	1.96	2.86	4.96	3.37	4.03	6.43	10.02	6.93	4.81	56.51
1882.....	2.48	7.92	4.92	3.85	10.59	12.71	1.89	3.13	1.21	3.76	2.60	3.15	58.21
1883.....	1.96	7.53	1.36	4.42	6.61	8.40	3.77	0.95	1.06	6.08	3.48	3.17	48.79
1884.....	1.51	4.24	3.70	2.49	3.79	6.20	3.62	1.54	6.86	2.74	1.30	5.19	43.18
1885.....	2.81	0.94	0.17	6.36	2.78	4.18	1.82	4.82	4.47	6.30	1.44	2.52	38.61
1886.....	2.19	1.86	2.45	2.98	3.56	3.83	0.05	4.19	7.24	0.80	1.74	0.80	31.69
1887.....	1.09	4.26	1.41	2.89	1.92	3.07	1.01	1.05	2.89	0.85	1.36	3.35	25.15
1888.....	3.03	2 03	3.48	1.41	8.61	5.50	4.59	1.43	1.70	3.61	3.41	1.99	40.79
1889.....	2.13	1.64	1.97	0.71	6.64	3.65	2.14	0.78	4.74	2.86	4.05	2.00	33.31
1890.....	5.72	2.01	2.20	2.94	4.33	4.50	2.14	1.03	0.96	1.30	1.29	0.26	28.68
1891.....	1.16	2.59	3.21	2.81	1.96	2.11	4.44	4.65	1.38	1.88	5.49	1.59	33.27
1892.....	1.14	3.41	2.69	7.19	7.51	2.51	5.63	1.89	3.48	1.05	4.19	1.78	42.47
1893.....	0.65	3.47	4.19	10.23	7.41	1.99	1 60	0.28	2.15	0.16	1.57	1.03	34.73
1894.....	2.51	2.58	3.09	3.36	2.8	1.56	2.06	1.86	2.94	0.85	1.63	3.10	28.34
1895.....	1.12	1.03	1.61	2.49	2.55	3.49	5.53	2.76	2.80	0.27	3.28	8.08	35.01
1896.....	1.77	2.11	1.25	1.91	2.49	6.45	8.51	1.87	5.42	1.76	1.88	0.31	35.73
1897.....	5.91	1.15	4.47	3.85	2.19	4.11	4.16	2.86	0.35	0.52	4.94	3.07	37.58
1898.....	5.81	2.70	9.65	3.76	5.12	4.76	2.34	4.40	6.82	6.15	2.91	1.83	56.28
1899.....	1.51	2.52	2.95	1.12	11.81	2.45	1.51	3.81	3.33	4.08	1.84	1.87	38.80
1900.....	0.88	4.85	1.50	1.06	2.49	1.45	2.89	4.44	5.15	2.63	2.61	0.41	30.36
1901.....	1.80	1.31	2.96	1.23	1.88	5.34	0.58	2.92	1.95	1.78	1.06	2.70	25.51
1902.....	1.01	1.01	3.73	3.03	1.80	10.10	1.41	5.12	2.30	2.15	2.82	2.23	36.71
1903.....	1.44	3.05	1.47	3.99	5.28	2.13	1.59	2.92	2.48	1.50	0.98	1.50	28.33
1904.....	1.98	1.49	4.73	4.81	3.74	2.34	4.25	2.63	3.96	0.11	0.02	0.57	30.63
1905.....	2.13	1.18	1.48	2.02	2.28	2.31	3.99	4.70	2.40	3.66	1.60	1.72	29.47
1906.....	2.99	2.18	4.02	2.26	3.70	3.03	0.93	4.88	3.77	1.46	3.13	3.14	35.49
1907.....	6.17	0.30	4.81	2.80	2.94	3.29	6.70	7.13	0.92	1.36	1.87	2.79	41.08
1908.....	1.77	4.28	2.21	4.48	7.27	1.38	1.37	2.62	1.22	0.29	1.17	1.62	29.68
Means.....	2.35	2.84	3.05	3.30	4.57	4.15	2.91	3.01	3.15	2.44	2.58	2.35	36.70

Section 65—Central Illinois.

Average Number of Days with .01 Inch or More of Precipitation.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alexander	15	8	8	12	10	12	10	9	8	8	6	7	8	106
Bloomington	16	8	7	10	9	10	8	8	7	7	5	7	8	94
Bushnell	15	5	4	7	6	7	7	6	5	6	3	6	4	66
Carlinville	17	8	8	10	10	11	11	9	7	7	6	7	8	102
Charleston	16	9	8	11	10	11	11	8	8	8	6	8	8	106
Coatsburg	15	6	5	7	8	9	9	8	6	7	5	6	6	82
Decatur	15	8	8	10	9	11	10	8	7	8	6	8	8	101
Griggsville	20	5	6	7	8	9	8	7	5	6	4	4	4	73
Hannibal, Mo	17	8	9	10	11	13	11	9	8	9	6	7	8	109
Havana	15	6	6	9	9	10	8	8	5	7	5	6	5	84
Hillsboro	14	8	8	11	10	11	11	9	7	8	6	7	8	104
Keokuk, Iowa	37	9	8	10	9	11	12	9	8	9	9	8	9	111
Knoxville	16	6	6	8	7	10	8	8	6	6	5	6	6	82
LaHarpe	14	6	4	8	6	9	8	7	5	6	4	5	4	72
Lincoln	20	8	8	9	8	10	8	8	7	7	5	7	7	92
Martinsville	16	7	6	8	7	9	9	6	6	5	4	6	6	79
Martinton	18	7	7	8	9	11	8	9	7	7	6	7	6	92
Minonk	13	7	6	9	7	12	9	9	7	7	5	8	6	92
Monmouth	15	6	6	9	9	12	10	9	8	8	7	7	6	97
Pana	19	7	7	9	8	11	10	8	6	7	5	7	7	92
Paris	17	7	5	8	9	10	10	7	6	6	6	6	6	86
Peoria	53	7	8	9	9	10	10	9	7	8	7	7	8	99
Philo	21	6	6	7	7	8	8	5	6	5	4	6	5	73
Pontiac	6	8	6	11	12	12	8	9	8	8	6	6	7	101
Rantoul	17	9	9	11	10	11	10	9	7	7	6	8	8	105
Rushville	17	7	8	9	10	11	9	8	8	8	5	7	6	96
Springfield	29	9	10	11	11	12	11	9	8	8	8	8	9	14

Section 65—Central Illinois.

Average Snowfall.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alexander	15	6.3	7.1	3.3	0.6	0	0	0	0	0	T	1.1	3.3	21.7
Bloomington	16	7.2	8.2	4.6	1.1	0	0	0	0	0	T	1.6	3.9	26.6
Bushnell	15	5.6	7.2	4.6	0.7	0	0	0	0	0	T	1.7	2.4	22.2
Carlinville	17	6.1	7.4	3.6	0.7	0	0	0	0	0	T	1.3	3.2	22.3
Charleston	16	4.7	6.4	3.3	0.5	0	0	0	0	0	T	1.0	3.1	19.0
Coatsburg	12	5.7	8.2	4.1	0.7	0	0	0	0	0	0.1	0.9	3.1	22.8
Decatur	15	6.3	7.6	4.4	0.4	0	0	0	0	0	T	1.9	3.9	24.5
Griggsville														
Hannibal, Mo	17	6.7	8.3	3.3	1.0	T	0	0	0	0	T	0.9	2.8	23.0
Havana	15	6.3	8.9	3.7	0.4	0	0	0	0	0	T	1.3	2.8	23.4
Hillsboro	14	5.1	6.4	3.7	0.6	0	0	0	0	0	T	0.7	4.0	20.5
Keokuk, Iowa	37	6.4	6.1	3.6	0.7	T	0	0	0	0	0.1	1.4	3.1	21.4
Knoxville	16	7.1	8.2	4.9	1.0	0	0	0	0	0	0.1	2.5	3.6	27.4
LaHarpe	14	7.6	9.5	5.2	0.7	T	0	0	0	0	0.1	1.6	3.4	28.1
Lincoln	20	7.0	7.7	3.3	0.3	T	0	0	0	0	T	2.0	2.8	23.1
Martinsville	16	5.3	4.9	3.2	0.4	T	0	0	0	0	0	0.6	3.5	17.9
Martinton	18	5.9	9.2	3.0	0.1	0	0	0	0	0	T	2.3	3.6	24.1
Minonk	13	6.1	8.4	5.2	1.5	0.1	0	0	0	0	0.1	3.2	4.5	29.1
Monmouth	15	7.9	7.7	4.8	1.3	T	0	0	0	0	0.2	1.4	3.6	26.9
Pana	19	5.7	5.9	2.2	0.3	0	0	0	0	0	T	1.0	3.4	18.5
Paris														
Peoria	16	6.3	6.8	3.3	0.4	T	0	0	0	0	T	1.0	2.9	20.7
Philo	21	6.0	5.4	3.4	0.1	0	0	0	0	0	T	1.6	3.3	19.8
Pontiac	6	9.0	9.1	5.2	0.7	0.1	0	0	0	0	T	0.5	5.8	30.4
Rantoul	17	7.1	8.	4.7	3.9	T	0	0	0	0	T	2.6	3.9	30.8
Rushville	17	6.5	7.1	4.5	0.6	T	0	0	0	0	T	1.3	2.8	22.8
Springfield	25	6.6	6.2	3.5	0.4	0	0	0	0	0	T	1.1	3.0	20.8

Section 65—Central Illinois.

Mean Temperature.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alexander	15	27.3	27.1	41.1	53.0	64.0	72.0	76.4	75.1	68.1	56.0	42.2	31.0	52.8
Bloomington	17	25.4	25.2	39.4	51.6	63.3	71.8	75.7	73.8	68.1	56.0	40.5	29.3	51.7
Bushnell	15	25.3	24.4	39.5	52.5	64.0	72.5	76.9	74.7	68.5	55.9	39.8	29.4	52.0
Carlinville	18	29.0	28.8	42.4	53.9	64.2	72.9	76.5	75.9	69.5	56.4	42.4	32.6	53.7
Charleston	23	28.0	28.9	40.3	52.9	63.5	72.7	76.5	74.3	68.0	55.6	42.0	32.6	52.9
Coatsburg	16	25.1	26.2	39.6	52.3	64.0	71.5	76.7	75.0	67.9	52.5	41.0	28.7	51.7
Decatur	17	26.6	25.9	40.8	52.3	63.5	71.8	75.8	74.6	68.2	55.7	41.2	30.6	52.2
Griggsville	23	26.9	28.0	40.9	54.0	64.2	72.6	76.7	75.2	68.1	55.9	41.8	31.6	53.0
Hannibal, Mo	17	27.9	26.9	41.8	53.5	63.8	72.5	76.4	75.1	68.4	56.0	41.9	31.3	53.0
Havana	16	27.4	27.3	41.8	53.0	64.0	73.6	77.2	75.8	69.3	57.2	41.8	31.4	53.3
Hillsboro	14	30.5	28.4	42.6	53.3	65.0	72.8	76.6	76.2	69.6	57.5	43.7	32.4	54.0
Keokuk, Iowa	37	23.7	27.5	40.4	52.3	63.1	72.1	76.9	74.9	67.1	54.4	39.7	29.0	51.8
Knoxville	18	22.1	22.5	35.8	50.2	61.7	70.0	74.7	72.4	65.0	52.3	38.5	27.3	49.4
LaHarpe	29	23.8	26.7	38.2	51.3	62.9	71.4	76.6	74.4	66.3	54.6	39.5	28.1	51.2
Lincoln	20	27.3	27.0	39.0	52.3	62.9	71.6	75.9	74.0	67.3	55.0	41.1	31.5	52.1
Martinsville	20	29.2	29.5	42.0	53.5	64.2	72.6	76.5	74.7	68.0	55.5	41.7	33.7	53.4
Martinton	21	23.9	24.0	36.6	49.4	60.7	69.8	74.2	72.0	65.0	52.6	39.5	28.8	49.7
Minonk	15	23.9	23.4	37.5	50.1	62.6	70.0	74.9	72.9	66.2	54.1	39.4	27.0	50.2
Monmouth	16	22.8	22.2	38.2	51.0	62.3	70.4	74.7	73.3	66.2	53.7	38.7	27.4	50.1
Pana	22	28.2	29.3	40.7	53.3	63.1	71.6	76.5	74.4	67.9	55.3	41.6	32.3	52.8
Paris	15	28.6	26.9	40.5	51.1	63.6	72.6	76.1	75.4	69.2	54.9	42.1	29.5	52.5
Peoria	33	23.1	25.9	37.0	50.9	61.7	70.9	75.4	72.5	64.3	52.0	37.5	28.1	49.9
Philo	24	25.8	26.1	38.8	51.2	61.8	70.8	74.8	72.7	65.9	53.1	39.3	30.2	50.9
Pontiac	6	25.9	23.5	41.4	50.0	62.1	69.5	74.7	73.3	67.6	54.2	40.8	29.6	51.0
Rantoul	17	25.4	23.7	39.3	50.5	62.3	71.2	75.8	73.7	66.8	54.5	39.4	29.6	51.0
Rushville	17	26.1	25.7	39.9	52.9	63.3	72.2	75.7	73.9	66.7	54.8	40.1	31.7	51.9
Springfield	33	26.3	29.1	39.1	52.0	63.5	72.3	76.5	74.0	66.4	54.6	40.7	31.3	52.2

Section 65—Central Illinois.

Lowest Temperature.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alexander	15	−17	−27	−6	18	28	41	46	44	23	12	−1	−18	−27
Bloomington	16	−24	−24	−1	15	26	31	41	37	22	16	−7	−13	−24
Bushnell	15	−17	−27	0	12	28	38	47	42	26	18	−1	−14	−27
Carlinville	17	−21	−23	0	22	28	38	49	47	25	20	4	−14	−23
Charleston	16	17	−23	−1	22	28	39	46	45	25	20	1	−12	−23
Coatsburg	15	−18	−29	−3	20	26	39	49	48	28	19	−1	−19	−29
Decatur	15	−22	−25	−1	20	25	32	45	43	20	20	0	−15	−25
Griggsville	20	−20	−25	−2	12	30	39	50	48	29	18	0	−16	−25
Hannibal, Mo	17	−15	−25	0	19	30	43	47	47	32	22	4	−18	−25
Havana	15	−15	−26	3	15	24	44	48	47	32	22	4	−15	−26
Hillsboro	14	−20	−22	−2	23	29	42	49	48	26	24	3	−13	−22
Keokuk, Iowa	37	−26	−27	−6	14	28	43	50	47	30	20	−3	−22	−27
Knoxville	16	−24	−28	−3	9	24	36	42	43	19	18	−6	−16	−28
LaHarpe	14	−20	−30	−3	13	26	37	48	42	23	18	−2	−17	−30
Lincoln	20	−20	−25	0	18	30	37	45	42	26	19	0	−15	−25
Martinsville	16	−22	−22	−4	22	28	35	46	44	25	17	4	−11	−22
Martinton	18	−22	−23	0	15	26	38	42	37	20	11	0	−17	−23
Minonk	13	−16	−28	−1	8	26	36	42	40	22	16	−5	−16	−28
Monmouth	15	−20	−27	−3	10	25	33	43	40	18	13	−4	−16	−27
Pana	19	−14	−24	−3	22	26	35	48	47	26	16	2	−12	−24
Paris	17	−12	−21	−2	22	27	33	45	40	24	19	3	−11	−21
Peoria	33	−27	−26	−6	17	28	35	48	41	26	14	−1	−22	−27
Philo	21	−25	−24	−13	17	24	31	41	38	17	12	0	−14	−25
Pontiac	6	−13	−23	3	22	29	40	47	46	33	24	11	−12	−23
Rantoul	17	−24	−24	−1	13	26	38	42	44	24	20	−5	−15	−24
Rushville	17	−16	−26	0	12	30	39	46	48	24	19	−1	−16	−26
Springfield	30	−22	−24	2	19	32	40	49	48	31	20	2	−14	−24

Section 65—Central Illinois.

Prevailing Wind Direction.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Hannibal, Mo	17	SW.	NW.	SW.	SW.	SW.	SW.	SW.	SW.	SW.	SW.	SW.	SW.	SW.
Keokuk, Iowa	37	NW.	NW.	NW.	SE.	S.	S.	S.	S.	S.	NW.	NW.	NW.	NW.
Peoria	4	S.	NW.	S.	NW.	S.	S.	SW.	S.	S.	S.	S.	S.	S.
Springfield	29	NW.	NW.	NW.	S.	S.	S.	SW.	S.	S.	S.	S.	S.	S.

Section 65—Central Illinois.

Highest Temperature.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Alexander	15	70	69	91	90	95	99	109	102	106	98	78	68	109
Bloomington	16	67	67	88	95	98	103	108	104	103	93	78	65	108
Bushnell	15	69	74	89	92	94	102	111	102	103	97	75	67	111
Carlinville	17	72	72	91	90	95	100	111	106	103	94	79	69	111
Charleston	16	69	69	86	90	94	99	105	99	100	92	76	64	106
Coatsburg	15	70	64	88	90	94	100	111	101	99	94	77	63	111
Decatur	15	69	68	88	98	97	100	109	103	103	94	78	65	109
Griggsville	20	73	69	92	92	95	101	110	102	103	94	80	68	110
Hannibal, Mo	17	77	69	91	90	91	100	108	100	101	91	78	69	108
Havana	15	68	68	91	89	94	100	109	100	98	90	76	67	109
Hillsboro	14	71	73	89	90	99	101	109	104	102	94	78	69	109
Keokuk, Iowa	37	72	70	88	89	92	100	108	102	99	92	79	69	108
Knoxville	16	65	62	84	93	94	101	108	100	100	92	78	70	108
LaHarpe	14	70	65	87	88	95	100	108	100	101	91	78	60	108
Lincoln	20	70	68	83	93	95	99	112	101	102	93	79	65	112
Martinsville	16	71	67	86	89	93	98	109	104	99	93	77	65	109
Marshall	18	68	66	85	90	99	102	106	101	104	95	76	65	106
Minonk	13	64	63	85	90	92	102	106	100	104	92	74	60	106
Monmouth	15	64	67	88	91	93	100	107	103	102	93	74	63	107
Pana	19	70	72	83	90	93	99	107	104	103	91	78	70	107
Paris	17	69	71	88	92	98	100	106	107	103	92	78	65	107
Peoria	53	67	70	87	92	98	101	106	104	105	90	80	71	106
Pike	21	67	70	86	90	97	100	104	101	101	93	76	64	104
Pontiac	6	65	60	84	84	90	96	98	99	96	85	71	61	99
Ranton	17	66	66	87	91	95	100	106	102	103	92	75	63	106
Rushville	17	69	72	90	95	94	103	108	101	100	92	78	68	108
Springfield	29	71	72	91	88	92	98	107	100	99	91	77	67	107

Section 65—Central Illinois.

Mean Relative Humidity.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Hannibal Mo., 8 A. M	17	82	83	80	76	79	79	79	82	83	81	80	83	81
Hannibal, Mo., 8 P. M	4	70	71	58	56	59	58	58	58	62	53	64	72	62
Keokuk, Iowa, 8 A. M	37	81	80	78	76	74	78	77	80	81	80	80	80	78
Keokuk, Iowa, 8 P. M	.....	77	76	69	62	64	66	60	63	65	63	69	76	68
Peoria, 8 A. M	4	86	85	84	77	78	79	84	85	86	82	82	85	83
Peoria, 8 P. M	3	78	74	70	57	66	62	63	66	65	62	68	78	67
Springfield, 8 A. M	20	82	81	80	74	76	77	76	80	81	79	78	80	79
Springfield, 8 P. M	20	74	73	69	60	62	62	58	61	63	59	67	74	65

Average Hourly Wind Movement (in Miles).

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Hannibal, Mo	17	9.8	10.3	11.2	10.9	9.4	8.3	7.5	6.9	8.1	8.8	9.6	9.7	9.2
Keokuk, Iowa	21	8.0	8.5	9.3	9.4	7.5	6.4	6.1	5.9	6.8	7.1	8.0	8.2	7.6
Peoria	4	10.0	10.7	10.9	10.8	9.5	7.9	5.9	5.8	6.4	8.1	8.6	9.1	8.6
Springfield	29	10.1	10.6	11.0	10.7	8.1	7.4	6.6	6.5	7.7	8.6	9.7	9.9	8.9

Section 65—Central Illinois.

Frost Data.

Stations.	Length of record—Years.	Average date of first killing frost in autumn.	Average date of last killing frost in spring.	Earliest date of killing frost in autumn.	Latest date of killing frost in spring.
Alexander	15	Oct. 6	Apr. 24	Sept. 18	May 11
Bloomington	16	Oct. 9	Apr. 27	Sept. 20	May 18
Bushnell	14	Oct. 14	Apr. 25	Sept. 29	May 13
Carlinville	17	Oct. 11	Apr. 22	Sept. 18	May 14
Charleston	16	Oct. 6	Apr. 24	Sept. 14	May 11
Coatsburg	13	Oct. 14	Apr. 24	Sept. 29	May 11
Decatur	15	Oct. 12	Apr. 23	Sept. 21	May 14
Griggsville	19	Oct. 17	Apr. 21	Sept. 24	May 20
Hannibal Mo	17	Oct. 16	Apr. 16	Sept. 30	May 14
Havana	15	Oct. 14	Apr. 23	Sept. 29	May 22
Hillsboro	14	Oct. 15	Apr. 22	Sept. 19	May 14
Keokuk, Iowa	37	Oct. 15	Apr. 11	Sept. 18	May 4
Knoxville	14	Oct. 13	Apr. 25	Sept. 20	May 14
LaHarpe	14	Oct. 5	Apr. 24	Sept. 13	May 21
Lincoln	16	Oct. 10	Apr. 27	Sept. 18	May 21
Martinsville	16	Oct. 11	Apr. 22	Sept. 18	May 14
Martinton	17	Sept. 30	Apr. 29	Sept. 13	May 16
Minonk	13	Oct. 8	Apr. 27	Sept. 18	May 11
Monmouth	15	Oct. 10	Apr. 28	Sept. 20	May 20
Pana	13	Oct. 16	Apr. 22	Sept. 20	May 11
Paris	16	Oct. 19	Apr. 22	Sept. 23	May 21
Peoria	53	Oct. 18	Apr. 15	Sept. 29	May 11
Philo	21	Sept. 30	Apr. 28	Sept. 14	May 28
Pontiac	6	Oct. 14	May 1	Oct. 9	May 11
Rantoul	17	Oct. 7	Apr. 26	Sept. 21	May 14
Rushville	17	Oct. 12	Apr. 23	Sept. 20	May 20
Springfield	29	Oct. 17	Apr. 18	Sept. 25	May 22

Section 66—Precipitation in Southern Illinois.

Albion, Edwards County, Ill.—Elevation, 531 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
§1856	.....	2.30	0.65	1.05	2.93	1.87	6.93	4.86	0.86	1.07	3.64	2.95	.....
§1857	.....	4.52	1.13	1.70	4.37	6.83	3.24	5.75	1.37	1.19	5.29	3.24	.....
§1858	3.47	7.44	3.74	5.28	8.33	5.66	5.08	1.45	2.19	4.08	3.28	6.00	51.00
§1859	2.26	4.60	4.02	5.91	2.78	2.64	4.14	1.62	3.62	0.93	4.17	4.33	41.00
§1860	.....	.....	0.66	5.04	4.09	5.51	.....	.....	6.11	1.45	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1887	0.50	4.41	5.60	5.42	2.08	3.78	3.96	†0.40	3.20	0.79	3.55	3.60	37.94
1888	1.04	1.40	5.33	2.21	3.18	7.35	.00	10.62	1.52	2.92	7.10	†4.01	48.68
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.85	.....
1894	2.59	3.35	2.43	3.09	5.32	0.46	2.12	3.75	2.14	2.35	T	4.01	31.67
1895	4.25	0.15	1.45	2.09	1.87	4.67	6.21	2.20	2.95	0.96	5.45	2.81	35.09
1896	0.73	1.30	4.81	1.23	13.21	6.13	4.89	2.54	5.68	2.05	3.35	0.46	46.38
1897	3.73	4.08	10.19	7.47	2.62	4.34	4.82	1.05	0.74	0.63	6.32	4.60	50.59
1898	6.00	1.91	12.39	5.27	6.68	3.35	5.51	3.42	3.57	3.25	2.27	1.47	55.09
1899	4.42	2.89	4.58	1.19	3.66	6.55	4.24	2.10	2.72	3.15	3.12	2.74	41.36
1900	1.89	4.24	2.30	1.55	5.20	7.81	4.19	1.36	4.91	2.28	3.85	1.79	41.28
1901	1.31	2.34	4.00	3.10	1.60	3.84	3.31	2.11	1.99	2.87	1.72	5.70	33.89
1902	2.00	0.86	2.86	1.85	4.15	4.98	2.33	3.02	3.03	0.93	4.92	4.99	35.92
1903	2.40	4.59	4.26	3.18	‡2.05	3.05	4.19	4.92	1.28	4.55	1.41	2.01	37.89
1904	4.47	2.71	12.06	2.82	3.06	3.57	1.80	2.23	5.86	0.45	0.60	3.28	42.91
1905	2.70	1.63	2.76	4.21	4.29	1.83	5.88	2.05	2.37	6.06	2.62	3.56	39.96
1906	5.41	2.44	5.35	1.61	2.00	1.99	2.00	3.92	4.85	2.14	5.45	4.45	41.64
1907	8.65	0.71	4.74	3.51	4.12	4.81	3.92	6.98	0.32	2.21	4.02	5.20	49.19
1908	2.56	6.55	4.99	5.38	7.60	0.99	2.59	1.83	1.71	T	3.59	1.15	37.94
Means	3.17	2.83	4.56	3.37	4.33	4.18	3.97	3.24	2.82	2.10	3.61	3.33	41.51

† Values for Fairfield, 16 miles distant.
‡ Value for Mt. Carmel, 16 miles distant.
§ Values for 1856 to 1860, for West Salem, 10 miles distant.

Section 66—Precipitation in Southern Illinois.

Benton, Franklin County, Ill.—Elevation, 598 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1902	0.60	0.80	3.66	2.37	2.79	2.88	1.62	3.30	1.80	0.96	4.89	5.55	31.22
1903	1.74	4.31	4.01	3.39	2.53	2.47	1.60	3.13	1.97	2.43	0.98	1.92	30.48
1904	2.67	3.34	8.41	4.01	3.16	3.57	5.20	2.21	5.75	0.26	0.52	2.76	41.86
1905	1.03	1.15	2.27	1.65	0.84	2.22	8.65	2.35	1.90	2.01	2.77	1.62	28.46
1906	4.85	2.70	†6.23	0.70	1.60	2.95	0.47	2.67	7.02	1.90	7.75	3.90	42.74
1907	7.05	0.45	2.26	1.82	5.30	10.72	†3.77	7.47	1.00	2.30	4.78	3.71	50.63
1908	2.56	8.79	3.29	7.00	4.95	0.72	3.00	2.05	1.00	0.00	3.35	1.75	38.46
Means	2.93	3.08	4.30	2.90	3.02	3.65	3.47	3.31	2.92	1.41	3.58	3.03	37.69

† For Hallway, 15 miles distant.

Section 66—Precipitation in Southern Illinois.

Cairo, Alexander County, Ill.—Elevation, 359 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1871	.....	.....	.....	.....	.....	.....	5.97	2.22	2.34	3.81	2.93	4.25	.....
1872	1.44	2.26	2.02	4.52	5.00	1.79	3.45	0.19	2.56	1.16	0.57	1.56	26.52
1873	5.03	6.68	3.27	5.54	5.07	4.45	1.68	2.48	4.09	5.28	3.04	4.25	50.86
1874	3.11	7.38	6.68	7.57	1.55	2.20	0.52	2.79	3.14	1.54	7.34	3.81	47.63
1875	3.21	2.17	6.73	3.01	3.11	8.41	9.88	3.32	0.16	1.76	7.96	3.21	52.93
1876	15.05	2.34	9.84	2.67	5.84	6.62	3.44	5.24	0.73	2.14	0.96	0.73	55.60
1877	1.93	0.25	3.62	3.87	2.13	4.88	5.63	1.58	3.15	3.12	4.76	4.55	39.47
1878	3.05	1.94	2.97	5.61	4.41	4.61	2.81	3.45	2.99	2.59	3.80	3.53	41.76
1879	2.81	2.03	2.95	3.03	2.79	8.70	1.37	7.05	0.93	3.87	3.25	6.63	45.41
1880	4.56	5.01	4.52	3.25	4.64	2.92	4.34	2.61	4.55	6.96	3.98	2.22	49.56
1881	3.56	4.97	1.33	3.62	2.44	1.81	0.18	0.11	2.74	2.74	4.98	3.70	32.13
1882	6.35	10.14	4.22	4.14	10.22	3.34	5.25	3.46	3.28	2.57	5.96	2.65	61.58
1883	2.74	8.52	2.14	5.64	3.85	6.11	7.95	1.73	0.34	6.97	4.36	2.18	52.53
1884	2.32	5.58	4.20	3.65	4.57	2.95	7.34	2.74	5.02	1.89	2.41	8.99	51.66
1885	3.49	1.48	1.08	1.43	3.21	4.63	0.82	2.40	4.76	2.89	2.79	3.01	31.99
1886	3.82	2.54	2.84	6.64	2.98	4.87	1.01	2.84	2.52	0.45	5.73	1.74	37.98
1887	2.15	4.60	2.18	2.09	1.37	2.34	1.42	1.10	1.67	0.38	3.33	4.12	26.75
1888	2.80	2.51	4.91	3.08	3.58	5.48	3.32	5.45	0.28	3.24	4.85	2.40	41.90
1889	4.61	1.57	1.40	0.97	1.91	8.07	5.15	1.10	3.82	2.81	5.56	0.77	37.74
1890	6.32	7.57	6.14	3.76	4.19	1.45	1.62	5.16	2.29	3.04	6.08	2.91	50.53
1891	3.95	3.20	5.86	1.55	2.48	3.97	2.21	4.77	0.29	0.49	7.30	3.49	39.56
1892	2.01	3.32	2.29	5.28	5.55	3.55	1.73	5.23	0.90	0.74	4.20	3.91	38.71
1893	1.26	3.93	2.09	6.91	6.70	7.59	1.23	1.64	6.83	6.26	2.75	1.60	48.79
1894	2.18	4.77	4.14	2.54	2.79	1.04	1.92	1.68	2.69	1.47	1.42	3.87	30.51
1895	3.77	0.39	2.76	2.75	1.48	4.86	5.97	0.71	1.86	0.50	5.27	3.25	33.57
1896	1.45	1.69	3.97	2.57	10.82	4.73	2.31	1.78	2.95	1.73	4.18	1.18	39.36
1897	3.89	3.95	7.50	6.49	1.12	6.87	2.76	0.89	0.53	0.91	5.50	3.69	44.10
1898	6.26	1.18	9.20	2.13	5.36	1.73	5.67	3.56	6.11	4.64	1.55	1.27	48.66
1899	5.46	2.51	3.59	2.33	5.27	5.74	3.90	1.06	2.25	3.42	3.05	3.84	42.42
1900	2.00	3.20	1.29	1.79	3.98	10.07	3.13	0.27	2.40	1.70	4.63	2.43	36.89
1901	1.52	1.78	3.62	2.70	2.00	0.91	4.57	3.83	1.56	3.40	1.77	4.02	31.68
1902	3.42	1.37	2.12	3.36	2.13	2.47	0.40	3.26	3.29	0.79	3.51	6.95	33.07
1903	2.35	4.19	4.28	1.85	3.52	2.37	4.89	0.81	0.75	1.98	2.07	3.85	32.91
1904	4.05	1.70	4.60	2.98	2.03	3.61	4.20	2.59	1.91	1.20	0.15	2.98	32.00
1905	3.41	1.98	2.84	2.19	4.11	6.00	4.43	3.79	0.69	3.00	3.64	3.40	39.48
1906	6.17	1.42	6.07	1.29	0.46	2.33	3.86	5.73	4.77	0.44	7.88	6.50	46.92
1907	7.77	3.58	3.39	3.81	6.78	2.95	3.92	2.43	1.14	2.90	4.43	2.48	45.58
1908	2.84	6.98	1.88	6.63	4.90	3.15	1.92	4.28	1.01	0.02	3.32	1.54	38.47
Means	3.84	3.53	3.91	3.60	3.90	4.31	3.48	2.77	2.45	2.49	3.98	3.35	41.61

Section 66—Precipitation in Southern Illinois.

Carlyle, Clinton County, Ill.—Elevation, 459 Feet.

Year.	Jan.	Feb.	Mar.	Apr	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1885	.....	.....	.....	3.50	3.72	5.29	0.62	4.06	6.77	4.39	2.97	3.49	.....
1886	3.12	1.40	2.42	2.09	2.35	8.10	1.34	3.78	5.48	0.72	3.91	2.67	37.38
1887	1.31	4.46	4.51	3.47	4.03	2.75	2.02	0.38	3.10	1.12	7.45	4.04	38.64
1888	2.54	2.77	3.46	1.77	3.95	7.59	3.61	7.18	0.87	2.47	3.58	2.78	42.57
1889	2.76	1.76	1.81	*1.50	4.93	6.41	4.86	1.09	3.43	1.83	5.32	1.48	37.18
1890	8.41	3.86	4.56	5.40	3.65	3.08	0.58	1.22	3.44	0.60	2.39	0.77	37.96
1891	1.45	3.75	2.57	2.62	3.18	5.30	0.73	2.37	0.87	1.69	6.05	1.05	31.63
1892	2.44	3.03	1.24	8.33	6.81	4.60	4.21	†2.64	1.09	1.28	4.23	1.36	41.26
1893	†0.84	†3.72	2.73	10.94	4.16	5.62	3.49	0.89	4.35	0.51	2.02	1.28	40.55
1894	2.17	2.17	2.68	2.20	3.47	1.44	2.06	0.84	4.97	1.44	0.68	2.92	27.04
1895	2.30	1.06	1.97	2.06	3.85	1.90	10.42	4.19	2.46	0.55	3.64	4.53	38.93
1896	2.39	2.62	2.46	1.57	6.67	3.36	6.92	3.55	6.86	1.93	5.31	0.39	44.03
1897	4.04	2.75	10.24	4.45	2.77	3.50	4.23	0.21	0.09	0.64	5.43	2.75	41.10
1898	3.98	1.76	11.93	3.91	9.55	6.48	6.23	4.66	2.87	4.21	2.44	1.80	59.82
1899	2.79	3.21	2.68	1.80	4.18	2.38	3.09	3.33	0.46	3.70	1.72	2.82	32.16
1900	0.56	2.87	1.95	1.32	6.25	8.70	.....	1.25	5.64	2.83	3.35	1.70	.....
1901	0.72	1.81	3.85	2.78	2.38	3.47	0.27	2.65	1.09	2.80	2.24	4.21	27.27
1902	1.07	1.02	5.23	2.50	2.47	7.75	3.00	6.44	2.51	1.36	2.86	3.96	40.17
1903	1.58	3.31	3.01	3.64	3.39	2.13	0.95	3.23	1.95	3.97	0.85	2.12	30.13
1904	3.10	0.71	8.69	4.48	2.41	2.73	6.92	4.53	5.95	0.83	0.38	1.20	21.93
1905	2.35	1.53	2.60	6.99	4.44	5.81	11.21	2.93	5.94	5.79	2.09	2.45	54.13
1906	3.08	1.78	4.72	1.71	1.64	2.05	0.47	2.65	5.26	0.84	4.90	2.13	31.23
1907	6.51	0.94	3.56	3.95	3.81	8.27	4.36	1.65	0.89	2.86	2.41	3.70	45.91
1908	1.90	4.51	3.48	5.05	9.98	3.90	5.10	1.90	1.10	0.50	4.15	0.50	42.07
Means	2.67	2.51	4.02	3.65	4.34	4.69	3.76	2.90	3.23	2.02	3.35	2.34	39.48

* Interpolated from surrounding stations.
† Values for Greenville, 19 miles distant.

Section 66—Precipitation in Southern Illinois.

Cobden, Union County, Ill.—Elevation, 656 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
†1875	0.95	2.71	5.88	1.09	7.98	7.11	11.09	2.01	0.38	2.09	5.25	1.51	51.05
1876	13.25	2.48	8.82	1.48	5.01	7.76	1.46	9.41	3.14	1.40	2.02	0.78	63.01
1877	1.80	0.70	3.87	1.75	1.15	7.12	1.64	3.47	5.95	5.33	4.58	4.78	48.44
1878	3.16	1.86	2.28	5.66	5.73	3.91	2.82	3.66	2.35	4.25	3.08	4.88	43.64
1879	1.70	2.10	2.39	1.48	2.65	7.02	4.46	12.51	1.40	5.75	4.93	5.59	51.98
1880	4.58	5.38	4.20	1.67	7.27	4.82	3.78	2.20	3.48	4.54	4.28	3.29	52.49
1881	2.79	5.34	1.99	2.29	2.57	5.35	0.00	0.38	1.91	6.51	6.10	2.17	37.40
1882	4.39	8.17	4.52	4.09	9.77	3.04	3.09	4.19	3.47	2.06	6.04	2.97	55.80
1883	2.25	8.19	3.93	5.75	6.64	8.21	2.86	1.02	0.51	7.21	6.85	5.14	61.56
1884	2.01	5.38	4.05	3.80	1.99	7.14	5.49	2.65	3.33	1.42	2.54	9.57	52.67
1885	1.64	1.23	1.43	2.60	2.24	6.89	2.19	1.13	1.54	3.43	1.80	2.92	38.13
1886	3.18	2.33	4.05	3.45	3.71	3.84	1.16	2.63	1.33	0.71	6.65	3.25	39.32
	*	*	*	*	*	*	*	*	*	*	*	*	*
†1895	.....	.....	.....	.....	2.10	.....	6.52	2.41	.....	.....	.....	.....	.....
1896	‡1.51	1.55	3.72	2.89	9.30	5.50	3.76	2.24	2.38	2.32	3.75	0.89	39.81
1897	4.47	1.47	12.64	8.31	2.00	1.67	2.99	2.05	1.06	0.77	5.13	5.15	53.71
1898	4.20	1.37	14.16	1.28	5.76	7.83	7.35	1.81	5.21	6.42	1.60	1.69	64.68
1899	5.76	3.52	1.01	1.17	6.06	1.26	1.23	1.12	2.44	1.65	1.91	4.17	46.63
1900	1.70	4.09	2.28	2.70	6.57	9.52	4.52	0.51	2.55	2.20	4.00	2.90	43.54
1901	1.34	2.45	5.73	3.74	1.69	2.57	1.20	5.96	0.77	1.97	1.28	5.68	34.38
1902	1.52	2.53	1.22	3.01	3.13	2.78	0.82	1.15	3.12	0.81	4.92	6.36	38.03
1903	2.26	4.76	5.87	3.51	3.16	2.25	3.22	1.85	1.31	3.59	2.22	2.82	36.85
1904	1.05	2.90	6.75	1.28	2.51	5.84	2.83	4.73	9.11	0.90	0.32	2.55	46.80
1905	3.45	2.10	3.03	4.83	1.31	2.10	9.55	2.85	2.94	6.46	2.24	3.50	47.39
1906	6.45	2.36	6.70	1.17	0.67	4.77	3.80	5.07	8.72	1.67	7.75	5.50	54.63
1907	5.82	1.56	2.95	3.11	5.14	2.77	4.18	5.11	0.79	4.22	5.17	3.10	44.52
1908	3.86	8.06	4.60	8.10	5.16	1.70	3.37	3.75	1.92	0.00	1.90	1.07	46.49
Means	3.64	3.50	4.96	4.05	4.65	5.16	3.90	3.80	3.10	3.23	4.37	3.69	48.05

† Values for 1875 to 1886, inclusive, and the year 1895 are for Anna; values 1896 to 1908, inclusive, are

Section 66—Precipitation in Southern Illinois.

Equality, Gallatin County, Ill.—Elevation, ... Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1899	5.79	3.12	5.35	3.09	3.86	3.53	10.04	1.80	3.14	4.25	2.32	2.83	49.12
1900	2.41	4.22	2.43	1.87	3.89	9.93	2.07	1.15	2.81	1.50	4.07	2.12	38.47
1901	0.65	1.76	3.26	3.06	1.65	3.02	2.11	3.39	0.85	4.74	1.54	3.53	29.56
1902	2.55	1.03	3.09	3.09	2.71	1.84	1.69	3.39	3.74	1.06	4.91	5.17	34.27
1903	2.67	4.44	7.27	3.53	2.60	2.40	1.83	1.62	0.60	2.17	1.29	2.74	33.16
1904	4.39	3.49	7.80	4.09	3.33	3.95	3.69	2.70	8.85	2.05	0.39	2.66	47.39
1905	2.77	1.70	3.05	3.38	4.91	2.21	9.40	3.78	1.88	7.72	2.82	3.30	46.92
1906	7.60	1.99	6.88	2.16	1.48	2.88	3.93	6.33	5.06	1.56	7.75	7.52	55.14
1907	10.90	1.35	4.13	3.25	6.47	5.53	1.96	8.07	1.67	3.88	4.96	3.73	55.90
1908	2.85	6.58	5.21	5.85	6.20	2.45	4.34	3.81	0.44	0.05	2.69	1.30	41.77
Means	4.26	2.97	4.85	3.34	3.71	3.77	4.11	3.60	2.90	2.90	3.27	3.49	43.17

Section 66—Precipitation in Southern Illinois.

Fairfield, Wayne County, Ill.—Elevation, 495 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1885	.....	1.37	0.35	2.17	3.36	4.20	1.70	2.00	7.16	2.24	2.55	3.00	.....
1886	2.87	1.65	2.45	3.28	2.55	1.20	0.65	2.57	2.86	0.24	6.50	2.58	32.40
1887	2.06	3.96	5.93	4.63	5.33	1.73	2.49	0.40	3.85	0.70	4.87	3.96	39.91
1888	3.70	2.00	3.49	1.04	2.18	0.12	1.93	5.91	0.44	1.08	1.99	4.01	27.89
1889	2.65	1.25	2.21	‡1.10	4.40	5.75	4.72	1.75	5.49	‡2.00	‡5.30	‡2.00	38.62
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1895	.....	.....	.....	.....	.....	.....	4.51	1.78	2.86	.....	3.97	3.64	.....
1896	1.15	1.69	2.88	1.24	6.81	8.29	6.00	1.36	6.64	2.43	3.98	0.43	42.90
1897	3.82	3.70	12.00	5.51	2.18	4.47	6.93	0.43	0.87	0.66	6.46	3.90	50.93
1898	5.06	1.20	11.99	5.01	6.69	5.05	5.05	4.91	4.35	3.30	2.39	1.64	56.64
1899	3.54	2.55	2.76	1.68	3.91	2.66	5.08	2.48	0.77	5.26	1.72	2.14	34.55
1900	0.93	2.94	2.18	1.17	4.24	9.07	3.82	1.75	3.94	1.63	3.45	1.64	36.76
1901	1.03	1.91	3.64	2.83	1.82	1.81	1.58	2.61	1.84	3.09	1.31	4.84	28.31
1902	1.48	1.00	3.65	1.78	2.97	4.55	1.83	3.29	1.55	0.76	3.18	4.11	30.15
1903	1.68	3.19	3.34	3.54	3.37	2.07	4.41	7.12	1.34	2.14	0.81	2.67	35.68
1904	3.04	2.15	9.72	2.86	3.90	2.78	4.90	6.83	6.04	0.34	0.70	2.63	45.89
1905	1.99	1.27	2.75	3.98	2.87	3.89	5.06	3.99	2.31	6.93	1.84	3.40	40.28
1906	3.99	1.90	3.39	2.28	0.70	3.45	2.45	3.68	5.43	2.95	4.50	4.14	38.86
1907	7.39	0.30	3.34	3.33	5.40	5.74	4.76	5.58	1.03	2.32	3.61	2.96	45.76
1908	†2.56	†6.55	†4.99	5.30	8.02	1.21	2.59	2.61	0.35	0.00	3.21	1.02	38.41
Means	2.88	2.25	4.50	2.93	3.93	3.95	3.71	3.21	2.97	2.12	3.28	2.88	38.61

Values 1885 to 1889, inclusive, and April, 1908 to December, 1908, are for Fairfield; values, 1895 to 1907 inclusive, are for Cisne. Cisne is 14 miles from Fairfield.

† For Albion, 16 miles from Fairfield.

‡ Interpolated from surrounding stations.

Section 66—Precipitation in Southern Illinois.

Flora, Clay County, Ill.—Elevation, 495 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1869	.....	.....	.....	10.90	5.10	6.40	6.10	2.70	4.30	3.00	5.70	3.80	.....
1870	4.90	1.30	3.30	2.50	3.00	4.30	6.30	5.10	1.30	3.50	1.80	2.60	39.90
1871	3.30	5.20	3.50	0.90	5.90	2.60	3.50	2.35	1.90	2.50	2.57	2.35	36.57
1872	1.05	1.70	1.90	4.20	4.70	3.10	9.50	2.70	1.70	1.00	0.50	1.70	33.75
1873	3.70	2.60	4.31	4.30	5.20	3.00	6.40	2.30	3.60	3.00	1.40	9.59	49.40
1874	3.20	4.60	6.30	6.10	3.60	3.40	6.20	9.80	1.50	2.20	3.80	4.30	55.00
1875	1.39	4.40	4.50	1.40	8.30	.....	15.30	2.90	3.50	1.80	2.70	2.60	.....
1876	9.80	3.40	5.90	4.10	9.80	11.40	6.50	4.00	2.60	1.80	3.00	0.30	62.60
1877	1.70	1.20	3.15	4.60	6.40	6.40	2.40	4.50	1.60	4.60	3.60	3.00	43.15
1878	3.00	3.70	1.80	4.80	5.80	3.20	6.50	2.90	1.10	3.40	2.30	6.30	44.80
1879	5.10	1.40	5.10	2.60	2.10	1.20	2.30	5.50	1.00	2.90	5.00	3.20	37.40
1880	4.59	2.20	2.70	2.50	5.40	3.90	2.50	4.50	7.70	3.20	1.80	2.50	43.40
1881	.....	1.85	3.00	1.80	1.71	7.50	.....	.....	.....	.....	.....	.....	.....
1882	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1883	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1884	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	.....	1.02	3.79	4.55	1.25	7.57	1.89	4.69	3.52	0.73	6.75	3.03	.....
1887	1.48	6.24	6.56	4.90	3.51	3.56	3.48	2.26	2.77	1.17	5.23	3.65	44.81
1888	2.39	2.72	5.22	1.62	3.32	4.83	1.79	7.66	1.26	2.35	6.16	1.97	41.29
1889	2.60	2.49	2.23	1.16	4.88	11.49	6.14	2.00	5.66	1.95	5.45	2.11	48.16
1890	8.30	4.15	6.45	4.80	2.70	3.72	3.14	3.05	4.90	1.38	2.20	2.50	47.29
1891	1.50	5.15	3.25	1.87	2.00	5.00	0.20	6.10	1.40	1.80	6.00	2.20	37.07
1892	2.10	4.00	1.75	7.60	7.00	1.50	3.50	5.85	0.50	0.75	4.40	0.75	39.70
1893	1.25	3.20	4.20	10.85	4.95	2.75	0.65	1.20	.....	.....	2.90	1.33	.....
1894	2.41	2.43	2.97	3.20	3.77	1.91	2.96	1.75	4.09	1.60	0.68	3.00	30.77
1895	3.46	0.15	1.63	1.84	2.47	5.60	5.20	2.56	2.58	0.46	4.34	3.77	34.07
1896	1.05	2.02	2.75	1.55	4.05	5.20	6.26	1.04	4.23	2.31	3.92	0.31	34.69
1897	3.93	2.29	9.42	6.00	2.31	4.28	2.95	0.39	0.24	0.37	5.48	2.95	40.61
1898	4.86	.....	.....	.....	.....	.....	.....	.....	4.76	4.06	2.41	1.52	.....
1899	2.94	2.69	3.48	1.49	2.73	4.56	3.53	2.57	0.60	4.54	1.71	2.65	33.49
1900	0.76	3.17	1.91	1.36	4.95	8.28	5.61	1.28	4.26	2.24	3.04	1.94	38.80
1901	0.86	2.19	3.46	3.07	2.01	3.91	2.09	2.80	0.84	2.95	1.82	5.18	31.21
1902	1.25	0.94	2.64	2.35	1.55	4.63	2.53	3.13	3.37	1.01	2.85	*4.11	30.36
1903	2.04	2.02	3.57	4.79	1.75	2.18	3.89	5.62	2.51	1.81	0.83	1.92	32.93
1904	2.37	2.00	9.50	2.45	3.40	5.14	3.41	3.02	6.26	0.37	0.86	2.15	40.93
1905	1.45	1.29	2.32	3.45	1.06	2.29	5.85	3.36	2.35	6.95	1.83	2.86	38.06
1906	*3.99	2.33	3.87	1.22	0.69	2.52	2.17	4.76	6.78	2.29	5.71	3.33	39.66
1907	7.59	0.63	3.09	3.63	4.02	6.08	4.44	4.98	0.95	1.89	2.92	3.33	43.55
1908	1.50	5.43	3.18	5.16	7.82	1.08	3.22	0.90	1.06	0.10	2.80	0.98	33.23
Means	3.15	2.71	3.90	3.70	4.07	4.54	4.37	3.54	2.84	2.24	3.29	2.85	41.20

Values, 1869 to 1881 and 1899 to January, 1898, inclusive are for Louisville; values, 1886 to 1889, and September, 1898 to December 1898, inclusive, are for Flora. These stations are 7 miles apart.

* For Clone, 11 miles from Flora

Section 66—Precipitation in Southern Illinois.

Golconda, Pope County, Ill.—Elevation, 500 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1866	0.50	1.20	5.88	2.05	3.33	.....	3.32	1.67	7.83	0.87	3.20	3.48	.....
1867	1.90	6.20	4.50	0.70	6.00	1.80	4.40	1.10	0.60	0.90	3.20	1.60	32.90
1868	2.20	0.60	4.10	4.20	3.20	1.30	2.10	2.60	4.70	1.10	1.04	3.30	30.44
1869	1.40	1.20	9.40	4.20	2.20	4.00	2.00	1.00	0.80	0.60	1.10	2.76	30.66
1870	4.50	7.50	4.60	3.80	2.10	3.70	1.40	2.50	1.60	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1878	.....	.....	.....	.....	.....	.....	5.66	1.12	2.96	3.74	4.80	4.73	.....
1879	2.48	2.39	3.15	4.08	1.83	5.95	3.99	11.31	1.65	5.11	4.48	8.61	55.03
1880	5.67	5.51	4.27	3.74	7.50	3.57	6.07	2.65	4.53	6.71	4.37	1.67	56.26
1881	2.80	5.85	2.05	3.91	3.50	4.21	0.61	0.17	4.30	3.69	5.83	4.17	41.09
1882	6.05	10.19	4.72	3.85	10.24	4.00	5.90	11.58	3.83	2.81	5.64	2.43	71.24
1883	3.33	6.84	1.57	6.98	7.13	6.15	4.13	1.27	0.71	6.67	8.66	3.66	57.10
1884	2.12	6.61	4.04	4.95	4.74	7.52	5.49	0.49	5.02	3.46	2.07	8.15	54.66
1885	4.82	1.48	1.01	2.86	2.76	8.82	2.18	4.86	5.78	4.00	2.67	3.24	44.48
1886	3.05	3.01	3.19	4.42	4.05	3.81	1.35	3.89	2.69	0.37	4.97	1.82	36.62
1887	2.14	5.32	2.39	2.89	2.00	2.66	1.11	1.71	5.19	0.64	4.02	3.67	33.74
1888	3.75	1.14	6.59	2.36	2.99	7.00	1.65	4.48	0.72	2.58	4.98	2.14	40.38
1889	4.54	1.15	1.58	0.95	3.38	7.27	5.27	1.57	4.78	1.58	6.58	2.53	41.18
1890	7.35	7.47	9.21	4.79	4.70	2.17	0.83	2.58	4.91	2.90	7.35	1.37	55.63
1891	4.58	3.50	6.62	1.64	3.05	4.84	1.85	6.33	0.38	0.75	7.94	3.84	45.32
1892	1.07	2.99	2.61	5.57	7.24	2.68	4.10	3.94	.....	2.05	3.88	1.58	.....
1893	2.04	4.11	2.43	8.82	4.92	3.78	3.04	2.50	2.62	4.63	3.32	2.45	44.66
1894	3.08	4.60	3.54	3.73	3.07	1.77	1.69	2.98	1.80	2.02	1.39	5.41	35.08
1895	3.79	0.38	3.16	2.71	†1.56	†4.44	9.03	1.13	4.04	0.77	7.20	3.46	41.67
1896	1.63	1.64	1.36	.....	.....	.....	.....	1.65	3.01	2.79	4.38	1.29	.....
1897	4.49	5.13	11.44	7.65	1.70	3.58	3.84	1.01	0.20	1.29	4.23	3.38	47.94
1898	7.03	1.25	8.93	4.23	5.17	2.33	6.00	1.56	7.68	3.90	2.31	1.84	52.03
1899	6.78	2.97	6.12	3.39	6.20	3.32	4.19	3.47	2.33	3.62	2.14	5.27	49.80
1900	2.17	4.17	1.76	2.62	5.97	10.14	2.73	1.73	2.68	1.41	6.52	2.05	43.95
1901	1.66	1.54	4.10	3.98	1.51	0.91	1.96	3.54	0.70	5.45	1.94	4.33	32.39
1902	3.56	1.80	2.82	3.50	3.33	2.16	1.66	4.20	2.83	1.70	4.96	7.16	39.68
1903	2.63	5.22	5.90	2.65	3.34	1.60	2.76	2.35	1.94	2.83	1.81	3.71	36.74
1904	4.87	2.67	8.47	4.01	2.70	4.01	3.82	3.35	6.49	1.47	0.32	3.58	45.76
1905	3.71	2.03	3.34	4.12	6.93	2.04	6.17	4.30	3.44	7.18	4.34	4.53	52.13
1906	6.81	2.13	7.68	1.90	1.99	3.16	2.74	5.10	4.11	2.12	7.68	8.89	54.31
1907	8.90	2.05	4.04	3.84	7.07	4.82	3.70	6.38	2.09	2.68	4.78	4.12	54.47
1908	3.58	10.31	3.22	6.39	4.92	4.85	3.51	1.93	1.36	0.11	4.16	1.54	45.88
Means	3.74	3.78	4.57	3.74	4.19	4.07	3.44	3.17	3.11	2.69	4.26	3.53	44.29

† Estimated.

Values from Aug. 1, 1898 to December, 1907, inclusive, are for Raum. All other values are for Golconda. These stations are 7 miles apart.

Section 66—Precipitation in Southern Illinois.

Grafton, Jersey County, Ill.—Elevation, 422 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1894	.....	.....	.....	2.33	2.03	1.94	1.35	2.15	3.75	1.89	1.90	3.04	.....
1895	0.38	0.38	1.58	1.30	2.59	2.96	7.51	1.92	2.78	0.53	4.61	7.23	33.77
1896	1.45	2.47	1.69	2.80	6.16	7.03	5.09	1.93	3.37	1.16	1.02	0.50	34.97
1897	2.87	2.01	6.97	6.51	1.17	4.99	3.73	1.24	0.11	0.07	3.81	2.72	36.20
1898	5.90	1.30	8.01	3.18	9.03	3.49	5.08	2.03	4.53	4.35	2.31	1.34	50.55
1899	1.12	2.52	3.73	2.91	8.02	2.58	2.27	3.31	1.46	4.75	2.17	2.36	37.20
1900	0.76	4.52	2.05	2.08	6.67	2.54	4.04	2.46	4.64	1.78	2.29	0.96	34.79
1901	1.78	1.95	2.46	1.44	0.38	1.52	2.10	1.08	0.45	1.86	1.68	3.88	20.58
1902	1.03	0.96	3.95	2.67	1.41	8.48	1.30	3.58	3.74	1.91	2.43	4.48	35.94
1903	1.67	3.28	3.44	3.40	2.47	3.40	1.34	4.44	5.48	1.85	0.53	1.64	32.94
1904	3.50	0.43	6.17	5.16	3.33	5.99	5.34	4.58	4.18	1.35	0.32	1.84	42.19
1905	1.40	0.67	2.09	2.94	2.98	0.49	5.09	4.21	4.46	8.17	1.54	2.19	36.23
1906	1.86	3.17	4.08	2.34	4.44	5.10	1.60	4.26	5.32	1.41	3.92	3.40	40.90
1907	5.52	1.42	2.38	3.14	2.62	5.54	6.74	3.83	0.55	2.32	1.64	1.72	37.42
1908	2.04	3.86	2.78	6.75	4.20	2.86	5.46	0.72	1.74	0.54	2.08	1.44	34.47
Means	2.23	2.07	3.67	3.26	3.85	3.93	3.87	2.78	3.10	2.26	2.15	2.58	35.75

Section 66—Precipitation in Southern Illinois.

Greenville, Bond County, Ill.—Elevation, 635 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1882	.....	.....	.....	.....	2.96	9.45	3.68	.....	.....	.....	.....	.....	.....
1883	1.00	4.50	3.66	5.05	6.25	4.21	7.50	3.52	0.03	9.52	6.62	2.46	54.32
1884	2.10	8.90	3.22	4.16	7.89	8.15	6.82	4.16	6.14	5.00	2.38	7.62	66.54
1885	2.80	1.87	0.03	5.90	5.19	5.06	3.97	4.92	6.86	5.42	2.95	3.45	48.42
1886	4.20	1.85	4.17	6.00	6.40	8.45	1.90	4.03	7.24	0.37	2.80	3.30	50.71
1887	.....	.....	.....	.....	.....	2.97	2.21	1.31	4.09	1.39	6.38	4.68	.....
1888	2.68	2.75	3.64	2.28	5.00	6.52	6.06	3.92	1.47	2.62	4.59	3.00	44.53
1889	2.65	2.04	1.81	1.70	7.10	4.43	3.45	0.58	4.24	2.50	5.30	1.57	37.37
1890	9.61	4.50	4.21	4.62	2.58	2.49	1.17	2.60	2.89	1.00	2.06	1.64	39.37
1891	1.50	3.04	3.16	2.24	2.63	5.91	0.93	4.37	0.41	1.57	6.29	1.52	33.57
1892	2.62	4.41	2.37	7.91	7.79	5.37	3.10	2.64	2.08	1.53	4.26	2.28	46.36
1893	0.84	3.72	3.54	11.86	5.61	5.16	1.68	0.19	3.73	0.49	1.90	2.40	41.12
1894	2.45	2.45	3.53	3.52	3.31	1.51	2.69	2.31	4.74	0.78	1.89	2.73	31.92
1895	1.93	0.79	2.66	3.19	3.16	2.64	6.97	2.05	3.02	0.77	4.56	5.45	37.19
1896	3.54	3.32	2.37	2.26	7.28	5.03	2.26	1.50	5.82	2.80	5.36	0.82	42.36
1897	4.97	3.25	7.50	3.90	0.91	3.37	5.69	1.36	0.18	0.59	7.19	3.96	42.87
1898	3.97	4.23	9.73	3.58	6.51	4.28	4.37	2.61	3.80	5.58	2.26	1.47	52.39
1899	2.48	2.00	3.38	1.82	5.47	2.58	1.89	4.73	0.84	2.98	2 13	3.90	34.20
1900	1.41	4.86	2.09	2.27	7.63	8.39	2.51	0.51	4 27	2.04	4.05	1.20	41.23
1901	1.40	2.02	3.32	2.87	1.96	2.21	1.69	4.40	1.17	2.35	1.25	3.68	28.32
1902	0.61	1.37	4.19	2.69	2.63	8.15	2.02	4.41	2.43	3.24	3.41	3.92	39.07
1903	1.29	3.48	3.34	4.07	1.71	2.41	2.29	2.84	1.84	2.51	1.10	1.80	28.68
1904	4.25	1.10	11.43	4.19	3.52	5.33	5.12	5.98	5.04	1.31	0.20	1.84	49.31
1905	1.95	1.73	2.14	3.91	5.07	4.26	4.46	3.44	3.47	6.17	1.95	2.08	40.63
1906	4.50	3.07	5.35	2.72	3.04	3.65	1.37	2.03	5.52	1.48	4.25	2.61	39.59
1907	6.18	0.75	2.55	2.73	4.03	6.20	5.27	5.97	0.79	3.28	1.82	3.63	43.20
1908	1.46	5.68	3.93	5.35	8.73	5.29	4.94	2.25	0.55	0.02	2.72	0.97	41.89
Means	2 90	3.11	3.89	4.03	4.78	4.91	3.56	3 02	3.18	2.59	3.41	2.85	42.26

Section 66—Precipitation in Southern Illinois.

Halfway, Williamson County, Ill.—Elevation, 569 Feet.

Year	Jan.	Feb.	Mar	Apr.	May.	June.	July.	Aug.	Sept	Oct	Nov.	Dec.	Annual.
1887	1.17	6.91	2.96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
*	*	*	*	*	*	*	*	*	*	*	*	*	*
1893	.....	.....	.....	.....	.....	4 45	1.50	1 95	3 00	.....	.....	.....	.....
1894	2 00	1.30	3.40	1.60	3.35	2 10	0 50	1 75	3 75	3 75	0 90	2.60	27.00
1895	3.35	0.65	1 20	1 80	1 55	4 75	3 75	2 60	2.00	0 20	6 61	5 70	34.16
1896	1 00	2 00	4.55	2 35	5 00	3.95	2 20	0 50	2 60	2 00	1 91	0 46	28.52
1897	2.83	2 86	11 43	6 31	2 58	5 45	2 66	.....	.....	1 15	.....	2 92	.....
1898	.....	.....	.....	.....	.....	2 73	2 19	.....	.....	.....	.....	.....	.....
1899	4.46	2 46	5 16	2.99	3 18	2 97	4.46	1 00	3 03	4 49	2 07	2 55	38.82
1900	1 71	4.02	1 89	1 91	3 09	8 65	2 99	0 68	2 71	0 73	3 40	1 92	33.70
1901	1.37	1.45	3 36	2.86	2 30	1 75	0 50	3.60	1 64	2 77	1 30	5 21	28.11
1902	1 87	0 74	3 16	2 57	3 63	2 87	1 57	3 58	2 54	0 78	4 12	4 75	32.18
1903	2 03	4.65	4 03	2.75	3 06	2 78	2 78	1 46	1 61	3 19	0 96	2 19	31.49
1904	3 60	3 94	5 97	4 50	3 18	2 47	4 82	2.80	5 55	0 83	0 53	2 81	41.00
1905	2 75	1 46	2 43	3 59	3 25	2 23	5 00	.....	.....	.....	2 13	3 19	.....
1906	6.18	2 24	6 23	1 52	2.21	4 12	3 76	3.79	6 79	1 35	6 40	6.60	51.19
1907	8 26	1 10	2.92	3 22	4 58	6 65	3 77	6 98	0 79	.....	.....	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	3 06	2.55	4 18	2.92	3 15	3 86	2 83	2 56	3 00	1 93	2.67	3.41	36.12

Values for 1887 and 1893—1897, inclusive, for Herrin; values for 1898 to 1907, inclusive, for Halfway. These stations are 11 miles apart.

Section 66—Precipitation in Southern Illinois.

McLeansboro, Hamilton County, Ill.—Elevation, 462 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1882	2.99	4.97	3.22	2.86	6.27	3.93	3.06	7.85	3.99	2.82	2.77	2.60	47.33
1883	2.30	8.27	3.32	3.19	5.20	9.13	3.14	2.54	0.00	9.28	6.64	3.50	56.51
1884	2.15	3.87	2.55	2.96	2.80	5.27	1.78	2.70	3.80	1.92	1.88	8.24	39.92
1885	4.20	1.10	0.89	2.22	2.51	4.83	1.74	3.67	6.02	3.66	2.56	3.50	36.90
1886	3.51	2.75	4.10	4.14	4.92	3.82	1.28	2.61	2.50	0.70	6.69	2.69	39.71
1887	0.98	3.94	3.10	3.43	3.35	3.45	3.05	0.19	1.45	0.77	3.08	3.29	30.08
1888	2.81	1.57	4.77	1.48	2.79	5.83	2.18	7.76	1.06	2.28	4.88	2.47	39.88
1889	3.20	2.36	1.95	0.88	2.80	.....	4.31	3.02	4.33	1.52	5.74	1.77	.....
1890	7.12	5.23	5.94	4.03	4.10	2.10	5.53	7.05	4.69	1.13	.....	1.38	.....
1891	*3.30	*4.50	2.08	*2.50	1.92	3.59	1.29	8.51	0.78	0.55	5.20	2.35	36.57
1892	1.43	3.44	0.93	7.50	6.92	2.30	1.85	3.97	.....	2.11	4.25	0.98	.....
1893	1.12	3.55	3.25	6.02	5.96	4.54	1.89	2.12	2.44	2.35	2.48	1.51	37.23
1894	2.35	2.88	3.01	3.38	5.33	1.12	0.98	.....	.....	.....	.....	.....	.....
1895	.....	.....	.....	2.22	1.99	7.62	7.11	2.03	3.00	0.57	5.57	2.85	.....
1896	1.47	2.24	4.51	2.00	7.06	4.55	4.38	1.29	3.91	1.73	2.39	0.70	36.23
1897	4.23	4.00	11.29	7.27	2.53	5.52	3.43	1.70	0.63	0.45	5.85	5.12	52.02
1898	4.98	1.29	11.11	5.38	6.05	4.99	3.57	5.15	2.75	3.77	1.26	1.69	51.99
1899	4.96	2.61	4.33	1.95	3.82	4.91	5.16	3.14	2.02	4.03	2.46	2.36	41.75
1900	1.24	3.52	.....	2.08	5.34	6.13	4.45	0.63	3.07	1.53	3.97	1.25	.....
1901	1.41	2.10	3.79	2.73	1.06	2.39	2.87	2.65	0.94	2.33	1.36	5.20	28.83
1902	1.93	0.96	3.83	2.18	3.30	2.68	2.21	2.71	2.44	0.85	3.65	5.27	32.01
1903	2.21	4.86	3.72	3.75	3.38	4.09	1.31	3.90	1.71	2.96	0.98	2.20	35.07
1904	3.78	3.49	8.89	3.93	3.32	4.67	5.48	2.12	10.11	0.40	0.94	3.17	50.30
1905	2.61	1.55	2.61	4.25	3.49	1.81	7.39	3.30	3.03	4.01	2.66	3.46	40.17
1906	6.20	2.74	5.38	1.46	0.50	2.89	1.92	4.35	5.43	1.76	5.32	6.01	43.96
1907	7.72	0.91	2.97	2.16	3.61	2.89	1.62	5.80	1.03	1.96	3.83	4.12	38.62
1908	2.35	7.55	4.45	7.10	6.60	0.65	2.83	2.17	0.41	T	3.23	1.33	38.67
Means	3.18	3.32	4.24	3.45	3.96	4.07	3.10	3.57	2.86	2.13	3.59	3.04	40.51

*Interpolated from surrounding stations.

Section 66—Precipitation in Southern Illinois.

Mascoutah, St. Clair County, Ill.—Elevation, 425 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1882	3.50	7.25	5.00	2.65	4.75	5.81	5.12	2.37	4.25	3.66	5.74	2.37	52.47
1883	1.55	12.25	3.00	3.25	6.20	6.70	5.60	3.20	.....	7.60	3.50	2.10	.....
1884	1.42	6.70	5.60	5.30	7.70	5.50	1.40	1.60	3.80	1.60	3.40	6.90	50.92
1885	1.10	0.71	0.44	6.30	2.30	8.10	5.00	4.20	7.10	6.60	3.10	3.74	48.69
1886	3.51	2.59	3.81	6.80	5.90	4.90	1.20	2.90	6.90	0.70	4.92	2.50	46.63
1887	1.58	4.70	4.80	3.40	3.80	1.50	3.50	1.20	2.70	1.50	5.50	4.20	38.38
1888	2.70	3.10	3.80	1.50	4.80	8.70	1.30	5.60	1.40	3.30	†3.20	†2.03	41.43
1889	2.65	*4.80	0.80	2.20	4.90	5.00	6.40	1.30	4.20	2.40	4.80	1.60	41.05
1890	10.00	4.70	4.62	8.20	2.80	3.20	0.30	1.90	5.30	†0.85	2.60	1.30	45.77
1891	1.65	3.18	3.07	2.50	2.60	5.30	0.70	7.40	1.90	1.30	6.40	1.40	37.40
1892	2.70	3.00	2.45	9.20	7.70	6.20	3.50	1.10	1.40	1.40	3.60	1.55	43.80
1893	0.74	2.43	3.50	10.20	4.20	2.80	2.50	1.30	5.70	3.00	1.60	0.60	38.57
1894	1.17	2.21	2.40	3.50	4.40	1.70	2.00	1.50	4.50	0.80	0.40	3.63	28.21
1895	3.36	1.76	2.19	1.60	3.20	2.10	4.80	1.70	1.90	0.50	3.75	5.75	32.61
1896	1.54	2.41	2.89	2.30	9.70	5.20	3.80	1.40	5.80	1.90	4.20	0.10	41.24
1897	4.71	3.59	9.91	3.64	2.27	4.83	3.27	0.14	1.00	6.40	4.68	2.73	41.17
1898	4.03	2.89	11.33	4.21	6.84	5.62	4.84	5.57	3.80	4.42	2.43	1.48	57.46
1899	2.70	3.45	2.88	1.95	5.56	3.59	1.94	2.12	0.65	3.36	3.50	3.41	35.11
1900	0.40	3.99	3.40	1.80	5.50	5.17	2.65	1.47	3.32	1.99	3.84	1.44	34.97
1901	1.61	2.55	3.10	2.81	4.19	3.10	0.76	0.73	1.80	2.76	1.44	3.53	28.38
1902	1.36	0.83	4.78	2.70	3.15	5.00	2.59	4.40	2.52	1.55	3.52	3.75	36.16
1903	1.76	4.74	6.34	3.54	2.12	3.92	3.83	3.30	2.83	3.45	1.58	1.44	34.85
1904	3.15	1.71	7.78	4.11	3.25	6.90	5.05	7.50	4.25	0.88	0.70	1.52	46.80
1905	3.37	1.84	2.89	5.69	4.66	1.61	6.07	1.77	6.66	6.14	2.90	2.23	45.86
1906	4.28	3.35	6.22	2.00	1.50	3.04	0.90	2.33	5.12	1.85	.....	.....	.....
1907	.....	.....	.....	3.85	8.19	3.33	3.61	4.50	1.74	2.82	2.76	3.45	.....
1908	1.84	5.44	3.30	5.91	10.67	3.85	4.73	2.70	0.81	0.11	3.28	0.61	43.25
Means	2.63	3.70	4.09	4.12	4.92	4.51	3.24	2.79	3.51	2.48	3.36	2.51	41.89

* Interpolated from surrounding stations.
† For Collinsville, 16 miles distant.

Section 66—Precipitation in Southern Illinois.

Mt. Carmel, Wabash County, Ill.—Elevation, 424 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1876.....	9.35	2.71	5.04	3.33	1.79	6.24	1.68	3.81	2.63	1.74	2.10	1.95	42.37
*.....	*	*	*	*	*	*	*	*	*	*	*	*	*
1884.....	.....	.....	.....	.....	.....	.....	2.05	1.29	5.62	2.51	1.97	7.59	.....
1885.....	3.81	1.48	0.95	2.71	2.85	4.38	2.38	5.16	8.57	2.96	4.28	2.20	41.73
1886.....	4.23	1.90	2.30	3.67	2.89	3.09	1.69	4.14	2.22	0.47	5.84	2.61	35.05
1887.....	0.87	4.53	3.96	4.52	4.29	0.75	4.14	1.61	2.91	0.91	4.42	2.80	35.71
1888.....	3.46	1.66	5.94	1.99	2.50	3.81	3.19	7.15	0.62	2.71	4.69	2.15	39.87
1889.....	3.24	1.76	1.47	2.04	5.60	4.72	3.60	2.13	3.84	2.29	7.11	2.82	40.62
1890.....	8.77	7.41	8.27	3.65	3.19	3.02	4.77	6.14	4.66	2.35	5.26	1.73	59.22
1891.....	2.83	6.04	4.70	2.05	3.19	3.53	1.57	2.11	1.22	0.48	5.48	3.25	36.45
1892.....	2.40	4.58	2.41	6.40	4.94	3.85	2.93	4.11	1.80	1.28	4.26	1.25	40.21
1893.....	2.61	4.81	4.00	7.93	4.56	5.84	1.41	1.44	3.43	3.18	2.62	2.02	43.85
1894.....	2.70	4.80	3.87	3.18	5.29	2.10	1.19	2.61	2.34	2.14	0.44	4.48	35.14
1895.....	5.84	0.50	2.61	3.14	2.43	1.83	5.77	1.91	2.96	0.42	5.75	3.55	36.71
1896.....	0.94	2.40	5.49	2.25	9.23	4.69	3.96	2.52	4.15	2.04	3.34	0.41	41.42
1897.....	4.52	4.10	10.22	6.20	3.14	3.15	3.10	0.59	0.60	0.58	6.69	4.88	47.77
1898.....	6.53	1.79	11.35	4.42	5.82	8.16	3.57	3.28	3.64	3.53	2.54	2.21	56.84
1899.....	4.93	4.01	5.16	1.15	3.35	5.65	3.47	1.39	2.03	4.89	1.82	3.33	41.18
1900.....	2.01	4.41	2.13	1.11	4.09	7.91	4.17	1.09	3.63	1.61	4.32	2.09	38.57
1901.....	1.63	1.70	5.20	3.34	1.84	4.41	0.32	1.46	2.14	4.43	1.74	6.07	34.31
1902.....	2.37	1.10	2.99	2.07	2.52	4.98	1.65	2.66	3.17	1.83	5.00	5.82	36.16
1903.....	3.58	5.46	4.44	5.82	2.05	6.22	3.46	2.71	1.38	3.96	1.89	3.44	44.41
1904.....	4.82	3.50	12.84	2.64	1.32	3.05	4.46	4.15	5.68	0.60	0.64	3.66	47.36
1905.....	3.28	2.28	3.14	4.82	4.82	2.39	7.48	3.54	1.26	7.14	3.00	3.32	46.47
1906.....	5.85	2.52	6.50	2.16	0.82	3.58	2.96	5.82	5.66	4.42	7.60	6.04	53.93
1907.....	9.39	1.28	4.50	3.48	3.80	3.64	3.42	6.88	0.64	2.02	4.72	4.92	48.69
1908.....	1.44	8.86	4.62	5.96	6.22	1.16	1.96	1.00	2.04	0.10	2.70	2.03	38.09
Means.....	4.06	3.42	4.96	3.60	3.70	4.09	3.09	3.10	3.03	2.33	3.85	3.33	42.56

Section 66—Precipitation in Southern Illinois.

Mt. Vernon, Jefferson County, Ill.—Elevation, 511 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1895.....	.....	.....	.....	.....	2.21	1.94	5.94	3.15	3.13	0.27	4.66	3.80	.....
1896.....	1.77	1.95	4.05	1.67	7.64	3.37	6.30	3.06	6.19	1.86	3.10	0.29	41.25
1897.....	3.57	3.39	10.18	4.47	1.30	7.49	3.09	0.77	0.41	0.56	4.00	1.89	41.03
1898.....	5.86	1.80	11.94	3.54	5.86	5.28	6.43	3.18	4.54	4.41	2.14	2.12	56.90
1899.....	3.26	3.38	2.90	2.27	4.19	1.94	4.98	2.40	0.90	3.95	1.30	2.19	33.66
1900.....	1.08	2.94	1.43	1.48	5.37	8.35	3.72	1.81	4.07	1.56	3.49	1.67	36.97
1901.....	1.37	2.54	3.79	2.51	1.23	2.32	0.69	3.29	1.53	2.25	1.79	4.05	27.36
1902.....	1.45	0.92	3.92	1.42	5.14	5.35	2.81	2.85	3.26	0.28	4.47	4.91	36.78
1903.....	1.66	3.37	3.15	3.66	2.54	4.89	0.94	2.87	1.94	3.20	0.81	2.68	31.74
1904.....	3.33	2.58	10.01	3.79	5.50	5.17	5.66	3.99	4.22	0.56	0.81	3.10	48.72
1905.....	2.42	1.41	3.18	4.92	3.55	2.14	7.97	2.75	4.24	5.87	2.52	3.89	44.89
1906.....	3.74	2.78	5.58	1.58	1.68	2.75	1.07	2.27	6.50	1.87	6.90	3.18	39.90
1907.....	8.15	1.00	3.38	3.22	4.39	5.50	3.98	6.61	0.97	3.49	3.64	3.50	47.83
1908.....	2.16	6.63	5.42	6.18	6.23	1.41	3.87	1.83	0.92	T	2.33	1.01	37.99
Sums.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38.28	.....
Means.....	3.06	2.66	5.30	3.13	4.06	4.14	4.10	2.92	3.05	2.15	2.99	2.73	40.29

Section 66—Precipitation in Southern Illinois.

New Burnside, Johnson County, Ill.—Elevation, 556 Feet.

Year.	Jan	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1895	.....	.....	2.65	2.20	1.98	2.24	5.51	1.26	2.81	0.60	7.03	2.05	.....
1896	1.33	1.20	2.86	3.36	9.44	5.90	4.90	2.54	2.54	1.71	3.14	0.68	39.63
1897	2.70	3.35	10.97	5.82	1.10	4.15	5.81	0.81	1.18	1.20	4.07	2.71	43.87
1898	4.67	1.07	8.51	3.76	7.28	2.77	5.82	3.28	4.33	4.35	0.99	2.24	49.07
1899	5.36	2.63	4.91	4.04	5.37	2.22	4.72	1.42	1.53	5.18	1.86	3.78	43.02
1900	1.84	3.36	1.89	2.08	3.90	9.08	3.43	0.77	2.36	2.74	3.99	1.61	37.05
1901	1.01	2.14	3.72	3.63	1.63	1.34	0.33	2.81	1.00	3.92	1.70	4.85	28.08
1902	2.89	0.77	3.08	3.49	3.20	3.40	2.04	4.33	5.07	*0.78	5.71	6.03	40.79
1903	1.01	4.90	6.21	2.76	3.06	3.13	1.43	2.13	0.89	3.35	1.06	3.19	33.12
1904	4.49	2.92	7.48	5.06	3.11	3.83	5.24	2.33	5.31	1.74	0.51	3.20	45.22
1905	2.61	1.72	2.72	5.25	5.59	2.31	10.39	3.00	2.96	6.44	2.74	3.58	49.31
1906	6.65	2.54	6.68	1.32	1.66	3.11	4.76	4.88	5.43	0.86	8.33	8.31	54.53
1907	9.97	2.11	3.77	2.84	4.85	5.26	4.72	5.56	1.28	3.10	4.30	3.16	50.92
1908	2.84	7.67	3.18	6.52	5.31	1.94	3.74	3.13	1.31	T	4.85	0.62	41.11
Means	3.64	2.80	4.90	3.72	4.11	3.62	4.49	2.73	2.71	2.57	3.59	3.29	42.17

*Value for Halfway, 15 miles distant.

Section 66—Precipitation in Southern Illinois.

Olney, Richland County, Ill.—Elevation, 486 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov	Dec.	Annual.
1887	1.16	.....	6.00	5.41	4.44	.....	2.51	1.82	2.80	0.75	5.52	.....	.....
1888	1.93	1.57	5.25	1.80	2.61	4.41	5.64	9.78	0.91	2.82	7.06	2.65	46.43
1889	2.73	2.66	1.91	1.23	4.70	5.71	7.59	3.32	5.09	2.71	4.66	3.96	46.27
1890	7.21	4.48	6.52	3.81	3.95	4.37	1.25	4.44	5.84	1.38	2.46	2.16	47.87
1891	2.06	5.48	4.23	2.74	1.30	3.54	0.56	4.41	1.33	1.15	6.71	2.37	36.18
1892	1.35	4.15	1.56	7.85	5.11	2.07	4.44	3.26	0.76	0.82	3.39	1.03	35.49
1893	0.64	3.73	4.05	10.44	4.14	5.38	0.96	2.65	3.95	1.97	3.10	1.74	42.75
1894	2.27	3.19	3.06	2.80	5.20	1.39	2.28	2.63	2.42	2.02	0.47	3.31	31.07
1895	1.25	0.15	1.40	2.15	1.78	3.00	5.85	1.48	2.06	0.13	4.10	3.47	30.42
1896	0.89	2.21	3.07	1.52	6.13	3.82	8.67	0.47	1.57	1.69	5.56	0.46	39.66
1897	3.77	2.92	11.77	6.49	2.75	4.48	2.85	0.40	0.71	0.52	6.57	3.86	47.09
1898	5.22	1.93	10.97	5.00	4.38	1.10	4.76	3.58	1.11	3.06	2.14	1.89	48.44
1899	3.98	2.81	3.03	0.99	2.93	3.95	2.82	2.92	0.93	2.86	1.82	2.66	31.70
1900	0.93	2.99	2.37	1.21	3.14	6.29	4.15	1.36	3.67	1.48	2.54	1.67	31.90
1901	1.00	2.88	4.24	2.58	3.09	2.56	0.25	2.45	1.07	2.49	1.27	5.16	29.04
1902	1.11	0.69	2.61	1.51	1.85	4.70	3.07	3.20	2.14	1.33	3.51	4.01	30.06
1903	2.93	4.02	3.66	4.96	0.91	3.57	4.46	2.19	0.42	1.99	1.35	2.87	33.67
1904	4.00	2.05	10.69	2.20	6.56	3.06	2.27	1.76	6.13	0.53	0.91	4.02	44.12
1905	2.89	1.29	2.61	3.74	3.11	2.49	4.13	4.10	2.07	8.70	1.65	2.41	39.09
1906	3.37	2.33	4.84	1.93	1.29	3.21	3.97	3.77	7.75	2.98	5.55	4.19	45.18
1907	7.54	0.52	4.50	3.92	6.38	5.77	7.08	6.37	1.35	2.43	3.57	3.52	52.94
1908	1.98	5.17	3.76	5.07	6.63	1.01	3.52	1.02	0.83	0.21	3.81	1.05	31.09
Means	2.89	2.74	4.61	3.61	3.75	3.59	3.76	3.09	2.78	2.02	3.55	2.79	39.21

Section 66—Precipitation in Southern Illinois.

Palestine, Crawford County, Ill.—Elevation, 500 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1882	.....	.....	.....	.....	.....	5.60	1.92	3.27	2.17	1.68	2.02	3.88	.....
1883	2.10	8.47	3.62	3.40	2.09	4.43	8.30	1.95	0.35	7.58	7.65	4.10	54.04
1884	1.90	4.40	1.79	3.05	5.38	5.09	3.34	1.75	5.29	1.40	2.27	5.84	41.50
1885	3.25	1.65	0.46	4.70	2.85	3.40	2.40	3.08	8.73	2.59	2.61	2.33	38.05
1886	2.88	1.70	2.55	5.36	3.56	6.15	3.69	3.21	2.21	0.26	5.52	2.60	39.69
1887	1.01	4.83	4.18	3.84	5.30	1.30	1.59	2.60	2.44	0.88	4.21	3.40	35.62
1888	1.75	1.47	4.72	2.08	2.40	*4.98	2.30	4.50	0.76	2.55	5.67	2.16	35.34
1889	2.72	2.20	1.71	1.37	4.00	5.50	2.46	2.95	5.44	2.33	5.43	1.93	38.04
1890	9.20	4.96	5.65	4.07	4.31	2.58	2.35	3.56	5.38	2.97	2.74	1.90	49.67
1891	2.00	5.68	4.15	1.84	0.76	*2.87	0.86	6.30	1.33	1.38	5.65	2.13	34.95
1892	1.15	4.97	1.88	9.18	6.60	3.53	2.47	3.02	1.60	1.08	4.43	2.00	41.91
1893	2.00	4.39	3.40	9.12	3.70	4.60	0.71	2.71	3.33	3.37	3.12	1.53	41.98
1894	2.21	5.01	1.97	2.88	5.60	2.68	1.85	3.92	2.94	2.15	1.05	2.22	34.48
1895	4.37	*0.63	1.66	3.65	3.43	2.05	7.04	3.10	1.46	0.57	4.85	3.69	36.50
1896	1.00	2.47	2.19	1.07	3.90	7.33	7.76	3.22	4.30	2.60	5.30	0.54	41.68
1897	3.38	2.95	11.02	5.60	3.45	3.61	2.08	0.01	1.60	1.09	6.33	3.18	44.30
1898	5.33	1.56	11.45	3.82	3.15	4.06	2.80	4.29	7.42	4.61	3.15	2.33	53.97
1899	3.74	1.95	4.96	1.91	3.28	3.40	2.98	3.12	1.47	2.99	2.13	3.62	35.55
1900	1.95	4.55	4.02	1.47	3.86	6.77	11.96	2.00	4.43	1.59	4.06	2.64	49.30
1901	1.03	2.95	5.57	2.52	1.34	6.42	0.97	2.75	1.38	2.79	2.00	5.34	35.06
1902	2.46	1.43	3.77	2.23	4.60	7.73	1.63	6.22	3.14	2.40	3.37	3.78	42.76
1903	2.60	3.97	4.47	5.41	0.52	2.51	4.51	6.83	0.73	2.66	1.95	1.42	37.58
1904	4.10	2.30	9.76	1.95	3.16	2.22	3.81	2.78	5.45	0.10	1.10	4.48	41.21
1905	2.00	1.45	2.82	3.36	3.67	1.46	6.28	2.94	2.44	8.54	1.80	2.61	39.37
1906	4.81	2.25	5.07	1.32	1.40	1.66	3.56	9.97	4.05	1.09	5.05	3.35	43.58
1907	6.55	0.10	5.55	3.54	4.15	4.48	4.15	7.32	0.60	2.70	2.90	3.34	45.38
1908	1.60	5.89	4.13	4.64	9.58	1.96	2.48	0.87	1.78	0.10	3.23	1.40	37.66
Means	2.97	3.24	4.33	3.59	3.69	3.98	3.56	3.64	3.05	2.37	3.69	2.88	40.99

* Interpolated from surrounding stations.

Section 66—Precipitation in Southern Illinois.

St. John, Perry County, Ill.—Elevation, 459 Feet.

Year.	Jan.	Feb	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
†1887	.....	.....	4.11	.....	3.29	.....	2.40	0.21	2.47	.....	.....	.....	.....
†1888	3.20	2.20	3.50	2.00	3.70	8.10	2.20	6.09	0.70	2.60	4.60	2.50	40.80
†1889	2.85	2.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1891	0.46	4.25	2.22	4.16	1.10	2.09	1.54	4.19	0.69	1.00	4.78	1.25	27.73
1892	1.50	2.56	2.16	5.98	7.76	2.14	2.08	*1.73	0.56	2.74	3.53	1.35	34.09
1893	0.40	2.93	3.69	9.81	3.74	4.66	1.16	1.58	2.79	2.58	3.20	1.28	37.82
1894	1.86	3.56	3.91	2.62	3.62	3.40	1.37	1.69	2.66	2.91	1.59	2.74	31.93
1895	2.07	1.05	2.94	2.12	2.50	2.84	5.07	2.04	2.59	0.83	*4.94	*3.56	32.55
1896	1.58	2.43	3.89	3.19	9.46	4.40	6.83	2.14	2.70	1.94	3.86	1.31	43.73
1897	3.17	2.46	11.55	4.55	2.45	4.52	1.91	0.66	1.50	1.46	4.70	4.16	43.09
1898	4.07	1.32	9.98	3.53	6.06	3.15	7.52	2.86	3.60	3.06	1.17	2.87	49.19
1899	3.65	3.73	3.34	2.67	3.03	4.73	3.60	2.53	0.84	4.08	2.76	2.08	37.04
1900	1.98	4.19	1.85	2.59	4.85	*7.23	4.89	2.47	3.20	1.12	3.27	2.59	40.23
1901	1.38	1.83	4.59	2.48	1.68	*1.60	*0.07	2.46	0.45	2.71	1.03	3.24	23.52
1902	1.51	1.16	4.20	2.09	3.07	3.03	3.49	2.12	2.44	1.02	4.10	4.54	32.77
1903	1.49	3.64	3.22	2.25	1.89	1.37	2.04	2.39	1.33	2.29	1.12	2.05	25.08
1904	2.63	2.84	8.26	3.43	‡3.16	4.39	6.66	4.16	4.69	0.83	0.65	2.96	44.66
1905	2.51	1.94	2.77	4.25	3.07	3.56	13.49	1.86	3.89	3.60	1.85	2.81	45.60
1906	4.30	3.65	4.38	1.33	0.94	2.75	3.37	2.64	8.28	0.85	6.40	5.66	44.55
1907	6.47	0.82	2.64	2.50	5.08	8.18	3.18	7.48	1.65	1.96	3.66	3.53	47.15
1908	2.28	5.55	3.67	7.31	6.21	1.41	4.72	2.16	0.96	T	†1.88	†1.16	37.31
Means	2.47	2.72	4.34	3.62	3.83	3.90	3.88	2.67	2.40	1.98	3.11	2.72	37.56

* For Hallidayboro, 10 miles distant.
† For Duquoin, 2 miles distant.

Section 66—Precipitation in Southern Illinois.

St. Louis, St. Louis County, Mo.—Elevation, 568 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1830	.....	.....	.....	.....	.....	.....	4.97	12.25	5.16	5.79	1.28	0.55	.....
1831	2.08	1.06	4.58	4.39	1.95	1.34	1.88	2.51	1.99	6.76	4.08	3.68	36.30
1836	.....	.....	.....	.....	.....	.....	3.66	6.51	5.90	2.59	4.20	5.02	.....
1837	0 84	1 35	3.13	2.34	3.00	3.46	2.48	2.73	2.85	0.79	1.96	2.01	26.94
1838	3.72	1.11	1.51	3.36	1.68	3.73	3.13	4.47	0.06	3.06	2.09	0.44	28.36
1839	2.21	2.50	2.59	5.46	7.93	7.26	5.71	2.89	2.45	3.96	2.48	2.00	47.44
1840	1.80	1.38	2.10	3.31	4.58	6.27	2.36	7.15	3.96	6.30	1.73	0.71	41.65
1841	0.84	0.88	4.99	3.85	2.38	1.67	3.09	5.63	3.22	6.81	5.44	3.93	42.73
1842	0.45	3.90	2.21	3.48	3.22	5.12	1.76	2.64	2.17	2.57	2.38	2.39	32.29
1843	2.34	1.90	3.49	4.87	4.15	3.95	2.49	1.32	2.19	1.55	4.82	1.72	34.79
1844	3.36	1.73	4.84	3.86	11.26	6.85	8.13	0.45	0.30	2.25	1.17	1.61	45.81
1845	1.83	1.07	3.18	2.28	4.42	10.01	4.75	6.23	1.03	1.16	1.10	0.93	37.99
1846	2.98	1.27	1.27	4.84	3.75	5.21	0.84	4.73	4.84	2.71	2.11	10.90	45.45
1847	2.12	3.58	2.28	3.98	4.36	8.61	5.37	0.90	3.26	8.74	8.63	0.89	52.72
1848	1.86	2.27	6.61	3.16	8.10	17.07	5.37	9.74	1.12	2.41	1.91	5.74	65.36
1849	4.18	0.56	2.70	2.64	2.71	6.46	9.40	5.15	5.81	2.17	2.11	1.82	45.71
1850	1.94	4.10	5.63	7.68	7.47	1.47	4.83	2.10	3.74	2.71	6.24	2.59	50.50
1851	0.61	6.74	3.14	4.70	2.83	6.19	1.77	8.97	0.49	1.51	1.99	3.90	42.84
1852	0.99	2.12	7.67	2.28	5.19	10.25	3.36	1.60	1.47	5.26	3.29	3.48	46.96
1853	0.52	1.67	0.79	3.24	3.64	3.23	4.10	5.48	4.67	0.96	1.51	1.08	30.89
1854	1.18	3.11	7.49	7.60	6.30	3.21	0.92	1.80	1.44	4.15	1.94	1.49	40.62
1855	4.66	0.70	2.89	2.65	7.46	4.27	5.17	6.53	3.89	3.89	5.16	3.10	50.37
1856	1.03	3.64	1.06	6.35	3.03	1.24	4.61	6.32	3.51	2.10	4.90	4.29	42.08
1857	0.41	7.74	1.80	1.72	4.81	3.74	2.82	4.15	3.18	3.02	3.80	1.87	39.03
1858	3.42	2.12	3.96	6.07	10.64	6.69	8.03	2.87	3.86	7.73	4.92	8.52	68.83
1859	2.32	5.35	7.32	4.89	6.60	11.02	5.54	2.93	4.44	1.80	5.43	3.76	61.40
1860	1.80	2.60	1.16	2.03	2.29	6.58	2.97	2.96	2.11	1.58	1.63	2.08	29.79
1861	1.16	2.01	7.38	3.18	4.39	4.96	2.04	3.41	4.14	2.85	1.39	1.09	38.03
1862	4.01	0.80	4.11	4.82	2.51	2.85	3.61	1.32	6.27	3.73	3.59	6.38	44.00
1863	4.11	3.99	3.02	1.55	2.68	3.16	2.51	6.93	1.56	4.76	2.15	4.03	40.45
1864	2.74	0.82	1.74	5.58	3.90	0.41	3.60	4.91	2.82	3.15	5.25	2.72	37.64
1865	0.87	3.75	8.61	3.31	5.66	5.21	7.94	1.97	2.60	3.33	0.00	3.63	46.88
1866	4.16	2.24	2.80	1.56	2.24	5.59	3.68	3.71	10.53	2.01	1.37	1.87	41.75
1867	2.28	4.81	2.37	0.53	8.26	5.64	3.71	2.29	0.17	1.31	2.74	3.65	37.76
1868	1.71	0.55	7.66	7.08	3.96	1.58	2.03	8.53	5.25	2.11	2.04	3.09	45.59
1869	2.02	2.49	4.21	1.61	3.60	6.25	2.49	5.51	1.70	3.42	7.48	3.16	46.97
1870	2.25	0.33	2.76	2.39	2.73	1.38	1.59	6.55	1.14	3.35	1.94	2.76	29.17
1871	2.53	2.92	1.27	0.49	3.15	2.51	1.64	3.55	0.25	2.07	1.83	1.17	23.28
1872	0.64	1.15	2.43	2.77	6.04	4.28	4.59	0.93	3.38	0.55	2.01	1.70	30.47
1873	3.54	1.52	2.40	6.88	5.73	6.68	5.96	0.07	3.02	3.27	1.61	5.10	45.50
1874	3.14	3.66	4.36	3.41	3.70	2.00	5.71	1.70	2.30	1.09	2.32	1.46	37.88
1875	0.51	2.59	4.08	2.53	5.48	10.84	9.50	2.66	0.24	1.23	0.89	2.42	43.00
1876	4.75	2.86	6.90	2.25	3.13	3.43	5.90	5.03	7.63	1.66	1.74	0.18	48.46
1877	1.24	0.88	3.41	3.03	3.11	8.69	2.88	2.61	3.56	1.92	3.76	3.34	41.13
1878	3.36	1.09	2.79	6.74	4.64	2.40	3.92	4.75	3.42	3.27	1.38	3.48	40.84
1879	1.64	1.48	1.92	2.31	0.95	4.04	1.97	2.23	1.31	0.68	1.30	2.84	25.70
1880	3.83	2.65	2.51	3.31	3.44	2.56	5.17	4.53	3.10	2.09	2.67	1.80	34.66
1881	0.49	4.16	1.95	3.14	3.96	2.74	2.13	0.31	3.14	7.21	6.71	1.40	37.37
1882	2.80	8.94	3.49	3.58	4.55	4.51	3.81	2.20	1.73	2.44	3.21	1.81	43.15
1883	0.94	5.88	2.29	3.31	2.89	5.04	4.31	3.31	0.01	6.60	3.71	1.78	40.10
1884	0.79	4.43	3.00	4.15	2.68	4.52	2.86	1.21	0.01	2.48	2.30	6.18	40.61
1885	3.26	0.87	0.40	1.84	2.80	7.68	2.58	2.96	8.98	7.51	1.68	2.03	45.59
1886	3.11	1.71	3.04	2.10	7.81	7.09	0.55	2.14	9.60	0.85	3.36	2.65	44.34
1887	0.65	3.68	3.54	4.36	5.27	2.54	2.74	1.11	2.47	0.76	0.61	3.54	35.30
1888	2.15	2.39	3.79	1.88	3.81	8.09	2.09	6.66	1.31	2.59	3.40	2.01	41.17
1889	3.04	4.78	1.62	1.68	3.80	4.72	2.02	0.85	3.51	1.65	1.43	1.03	33.16
1890	7.47	2.86	5.99	4.05	5.81	3.18	0.37	2.43	1.80	0.86	1.55	1.32	37.69
1891	1.35	2.95	2.29	2.29	2.73	5.97	1.50	2.75	1.43	0.65	5.30	1.32	30.53
1892	1.52	4.89	1.92	7.60	7.87	2.73	4.64	1.75	1.59	1.66	3.46	1.99	41.62
1893	0.33	2.98	5.10	10.80	5.42	3.49	2.49	0.65	3.69	1.66	1.36	1.32	39.33
1894	2.56	2.88	2.69	2.68	3.61	1.12	1.35	1.66	3.11	1.50	1.49	2.73	27.44
1895	1.65	0.43	2.82	0.46	3.16	2.46	7.26	2.08	2.01	0.23	3.98	4.66	31.20
1896	1.43	2.81	2.03	2.43	9.12	4.57	4.67	2.12	2.42	1.20	3.70	1.05	37.55
1897	3.75	2.67	8.25	4.66	1.59	5.32	3.23	0.66	0.09	0.31	6.21	3.43	40.17
1898	4.54	1.71	7.73	3.85	8.55	3.85	7.41	0.87	3.23	4.34	2.07	1.03	49.20
1899	1.66	3.40	3.96	4.98	6.32	2.32	4.54	2.77	1.27	2.89	1.95	1.55	34.61
1900	0.65	5.09	1.45	1.83	4.47	2.62	3.85	1.30	2.68	2.07	3.10	0.40	29.51
1901	1.12	1.86	2.94	2.35	2.69	3.92	1.47	0.76	0.64	2.12	1.21	3.72	24.80
1902	1.18	0.83	4.50	2.49	3.01	7.86	2.34	5.20	1.98	2.00	3.20	3.81	38.43
1903	1.76	3.14	3.20	2.79	2.08	5.71	2.68	6.16	3.06	1.37	0.61	1.25	33.81

St. Louis, St. Louis County, Mo.—Concluded.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1904	3.15	0.84	7.87	5.25	2.88	4.64	3.09	2.62	2.97	0.50	0.54	1.36	33.71
1905	2.47	1.12	2.35	2.32	4.67	2.72	4.42	2.58	5.56	6.64	1.63	2.06	38.54
1906	3.57	2.92	4.53	1.98	2.61	2.80	0.98	3.72	4.40	1.25	4.67	2.09	35.52
1907	7.35	1.12	2.39	3.65	5.57	4.96	3.32	4.36	1.57	3.15	1.89	2.06	41.39
1908	2.08	3.39	3.43	3.84	7.72	3.02	4.24	1.55	1.24	0.21	2.83	0.64	34.19
Means	2.27	2.64	3.61	3.61	4.53	4.83	3.69	3.48	3.00	2.83	2.99	2.62	40.10

Section 66—Precipitation in Southern Illinois.

Tilden, Randolph County, Ill.—Elevation, 500 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1887	1.65	.....	4.62	2.66	4.49	2.27	1.93	0.88	2.97	2.28	7.09	3.41	.....
1888	2.17	3.27	5.18	1.82	2.79	7.23	1.30	10.22	2.26	3.55	4.48	2.49	46.76
1889	3.55	2.35	1.68	*1.60	3.68	8.11	3.41	3.59	2.27	1.51	5.15	1.66	38.56
1890	8.12	3.93	7.33	6.51	2.92	1.38	1.73	7.06	4.34	0.62	2.38	1.59	47.94
1891	1.88	5.22	2.00	2.74	2.87	4.27	0.65	3.43	0.66	1.93	6.23	1.83	33.71
1892	1.67	4.09	1.52	11.03	5.91	3.22	2.95	2.22	2.59	2.44	5.95	2.19	45.78
1893	0.28	1.77	2.74	9.23	4.09	4.14	2.64	2.39	3.07	6.55	1.68	1.23	39.81
1894	2.30	2.60	2.81	3.93	3.57	1.17	3.15	1.32	3.91	1.22	0.77	2.84	29.59
1895	1.50	0.45	2.53	1.03	3.08	3.84	3.75	2.56	2.65	0.41	4.30	5.45	31.55
1896	1.33	2.36	3.69	3.64	8.56	2.84	6.06	1.47	3.15	1.56	3.43	0.22	38.31
1897	3.16	2.37	10.51	3.55	1.57	4.88	0.93	0.49	0.27	1.13	4.54	4.13	37.53
1898	3.83	1.94	9.95	3.40	5.93	5.09	6.91	4.85	4.81	6.36	1.88	1.97	56.92
1899	2.16	2.81	2.27	1.30	3.34	2.72	5.79	1.64	0.93	2.75	1.33	1.89	28.73
1900	0.63	3.05	1.25	2.37	2.79	6.66	3.42	1.50	3.22	2.20	3.38	1.19	31.72
1901	0.99	1.96	3.03	2.11	2.32	1.37	1.33	1.05	2.37	2.28	2.40	3.59	24.80
1902	0.96	0.76	4.47	2.04	4.70	2.82	2.71	4.15	3.79	1.42	4.09	4.33	36.24
1903	0.95	2.89	3.06	3.13	2.69	2.51	1.35	3.58	1.63	4.32	2.05	1.69	29.85
1904	2.39	1.83	8.66	4.62	3.14	5.18	2.23	5.33	6.17	0.57	0.86	1.66	42.94
1905	2.61	1.52	3.79	4.63	3.09	0.26	11.34	3.20	5.19	3.91	2.02	2.92	44.48
1906	4.51	2.64	4.36	1.77	2.80	2.98	1.72	4.42	7.42	1.52	5.70	3.23	43.07
1907	6.13	1.16	2.66	3.73	5.40	4.41	2.60	5.11	3.99	3.01	3.17	1.05	45.42
1908	2.63	5.61	3.94	7.02	7.08	2.30	5.26	2.74	1.32	0.10	4.34	0.72	42.46
Means	2.49	2.60	4.18	3.81	3.93	3.62	3.33	3.33	3.15	2.35	3.51	2.47	38.77

Values, 1887 to February 1898, for Jordans Grove; values March 1898, inclusive, for Tilden.
* Interpolated from surrounding stations.

Section 66—Precipitation in Southern Illinois.

Vernon, Marion County, Ill.—Elevation, 515 Feet.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.32	2.97	3.31	.....
1901	0.75	3.01	1.10	1.05	8.02	9.03	5.38	2.93	4.33	3.20	2.51	1.01	43.52
1902	1.62	1.80	5.21	1.97	2.24	2.07	2.95	1.61	0.71	2.59	1.41	3.24	25.51
1903	1.15	1.07	4.24	2.20	2.04	6.62	*2.02	4.08	2.82	1.52	2.77	3.06	33.59
1904	1.05	2.51	3.47	4.36	0.62	2.60	2.93	2.87	1.48	3.05	0.87	1.72	27.53
1905	3.37	0.25	6.43	4.43	4.82	2.50	3.48	5.32	3.98	0.81	0.50	1.35	37.24
1906	1.05	1.65	2.65	4.57	4.97	5.47	9.72	2.36	2.55	5.87	2.69	2.06	45.61
1907	4.50	2.40	5.36	2.25	2.30	3.12	1.00	4.00	4.70	1.05	5.42	3.19	39.29
1908	6.82	0.88	4.77	3.45	3.82	4.96	4.56	6.55	0.51	4.08	2.50	3.46	46.36
1909	1.53	4.98	2.97	5.22	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means	2.45	1.72	3.83	3.28	3.60	4.55	4.00	3.72	2.64	2.83	2.41	2.49	37.50

* For Greenville, 17 miles from Shobonier.

Section 66—Southern Illinois.

Average Number of Days with .01 or More of Precipitation.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Albion	16	8	6	10	8	9	8	8	7	5	5	7	8	89
Benton	7	6	6	9	6	7	7	7	6	5	3	4	7	73
Cairo	37	12	10	12	11	11	11	9	8	7	7	9	11	118
Carlyle	16	9	9	11	10	10	10	9	7	6	5	7	8	101
Cobden	13	8	8	11	9	10	9	8	6	6	5	6	7	93
Equality	10	10	8	11	9	11	9	9	8	7	5	6	9	102
Fairfield	14	6	6	9	8	8	9	8	6	6	4	6	8	84
Flora	18	8	8	10	9	10	9	8	7	7	5	7	8	96
Golconda	21	9	8	11	9	10	10	8	7	6	5	7	8	98
Grafton	10	7	7	10	10	11	10	8	8	7	6	6	7	97
Greenville	21	8	8	10	11	10	10	8	7	7	6	8	8	101
Halfway	13	8	7	10	8	8	7	7	6	6	4	6	8	85
McLeansboro	19	9	9	11	10	10	9	8	7	6	5	8	8	100
Mascoutah	20	7	9	10	9	11	10	8	6	7	5	6	6	94
Mt. Carmel	15	11	10	12	10	11	11	9	8	7	6	8	11	114
Mt. Vernon	14	7	7	10	9	9	10	8	7	7	5	6	8	93
New Burnside	14	7	8	11	9	10	10	8	6	6	5	6	8	94
Olney	21	8	8	10	9	9	9	7	7	6	6	8	8	95
Palestine	19	7	8	10	9	9	9	8	7	6	5	7	7	92
St. John	17	6	7	8	8	9	9	8	7	6	5	5	6	84
St. Louis, Mo	38	9	9	11	11	12	11	9	8	7	7	9	9	112
Tilden	20	8	9	11	10	11	9	9	7	7	6	8	9	104
Vernon	9	6	5	7	8	7	9	7	6	5	5	6	7	78

Section 66—Southern Illinois.

Average Snowfall.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Albion	16	4.7	4.7	2.4	0.1	0	0	0	0	0	0	0.7	3.1	15.7
Benton	7	4.7	5.3	0.7	0.6	0	0	0	0	0	0	0.4	1.9	13.6
Cairo	23	4.2	3.5	1.3	T	0	0	0	0	0	0	0.7	1.8	11.4
Carlyle	8	7.3	5.8	2.3	T	0	0	0	0	0	0	1.8	3.1	20.3
Cobden	12	2.5	3.3	1.2	0.5	0	0	0	0	0	0	0.4	1.4	9.3
Equality	10	1.1	5.3	1.6	0.7	0	0	0	0	0	T	0.6	2.1	11.2
Fairfield	12	2.2	5.3	1.6	0.3	0	0	0	0	0	0	0.5	3.5	13.4
Flora	20	3.9	4.3	4.4	0.3	0	0	0	0	0	T	0.7	3.8	16.4
Golconda	18	3.9	3.7	2.0	0.2	0	0	0	0	0	0	0.6	2.3	12.7
Greenville	16	6.4	8.1	4.2	0.6	0	0	0	0	0	0	1.7	4.3	25.6
Halfway	12	4.6	4.2	2.2	1.2	0	0	0	0	0	0	0.2	1.0	14.8
McLeansboro	19	4.2	4.3	2.6	0.4	0	0	0	0	0	0	0.9	2.2	14.6
Mascoutah	21	6.5	6.9	3.8	0.6	0	0	0	0	0	0	0.9	3.4	22.1
Mt. Vernon	14	3.6	5.6	1.7	0.5	0	0	0	0	0	T	0.6	3.9	15.9
New Burnside	14	4.0	5.2	0.6	0.7	0	0	0	0	0	T	0.5	1.9	12.9
Olney	20	5.8	5.3	3.6	0.4	0	0	0	0	0	T	0.9	4.1	20.4
Palestine	19	5.8	5.1	2.6	0.2	0	0	0	0	0	T	0.9	1.3	18.9
St. John	13	2.7	3.7	1.7	0.1	0	0	0	0	0	0	0.2	1.6	10.3
St. Louis, Mo	38	5.1	5.3	3.6	0.9	0	0	0	0	0	T	0.8	2.8	18.5
Tilden	20	3.9	4.7	3.2	0.6	0	0	0	0	0	T	1.0	2.8	16.2
Vernon	8	8.0	7.4	1.8	0.6	0	0	0	0	0	0	0.1	4.8	23.0

Section 66—Southern Illinois.

Mean Temperature.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Albion	17	32.0	31.0	44.7	55.0	66.1	74.3	78.2	76.6	69.8	56.8	43.4	34.2	55.2
Benton	6	34.3	32.9	50.7	56.1	68.2	73.0	78.5	79.2	72.3	60.0	48.5	37.0	57.6
Cairo	37	35.6	37.8	47.5	58.4	67.6	75.4	78.9	77.6	70.7	59.6	47.2	38.8	58.0
Cobden	25	33.7	35.5	46.2	56.7	67.0	74.5	78.6	77.4	70.8	60.2	46.7	36.6	57.0
Equality	10	35.4	32.5	48.5	55.6	67.4	73.7	78.7	78.3	71.7	59.8	47.4	37.0	57.2
Fairfield	15	33.4	31.3	44.8	55.3	66.2	73.6	77.8	75.9	70.2	58.3	45.1	34.6	55.5
Flora	22	30.5	30.4	42.5	54.3	64.1	72.6	76.5	74.6	68.0	55.5	42.2	34.3	53.8
Golconda	30	34.0	36.0	46.5	57.6	67.4	75.0	78.5	77.7	71.5	59.7	46.6	37.4	57.3
Greenville	30	29.1	30.4	42.0	54.9	64.1	73.3	77.5	75.6	68.9	56.5	42 4	32.9	54.0
Halfway	12	33.8	32.5	46.8	56.6	67.4	74.8	78.8	78.3	71.5	59.0	47.3	36.6	57.0
McLeansboro	25	31.7	33.4	44.1	55.6	65.1	74.2	77.7	75.6	69.6	57.1	44.6	36.0	55.4
Mascoutah	18	30.7	30.5	43.1	53.8	64.3	74.0	77.9	75.9	69.8	56.6	44.1	34.8	54.6
Mt. Vernon	14	32.7	31.3	44.9	54.3	66.2	74.0	77.9	77.0	70.4	58.1	45.3	33.5	55.5
New Burnside	13	35.2	33.2	47.9	56.6	67.7	75.0	79.1	78.3	72.4	59.0	47.1	36.3	57.3
Olney	21	31.8	31.9	44.0	54.7	65.4	74.7	77.9	76.2	69.7	56.4	43.8	35.4	55.2
Palestine	26	28.8	30.5	42.0	53.9	63.6	73.0	76.5	74.1	67.4	55.2	42.6	33.1	53.4
St. John	19	31.6	32.8	46.9	56.0	67.3	75.2	78.3	77.7	71.0	57.8	45.0	35.7	56.3
St. Louis, Mo.	36	31.8	34.0	44.2	56.2	66.2	74.9	79.1	77.5	70.4	58.6	45.0	36.1	56.2
Tilden	22	32.3	32.6	44.7	55.8	65.4	73.9	77.2	75.8	69.6	57.3	44.6	36.0	55.4
Vernon	8	31.5	28 8	45.0	53.2	65.0	72.4	77.7	76.0	69.0	58.0	44.4	33 4	54 5

Section 66—Southern Illinois.

Lowest Temperature.

Stations.	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Albion	16	—12	—21	5	22	32	37	50	50	28	22	0	—10	—21
Benton	6	—7	—14	14	21	30	42	54	48	35	28	13	—10	—14
Cairo	37	—16	—14	6	24	37	46	57	52	36	24	7	— 7	—16
Cobden	13	—6	—19	0	24	31	42	52	49	32	25	10	—10	—19
Equality	10	—13	—22	4	24	33	42	54	50	27	26	12	—9	—22
Fairfield	14	—22	—21	0	22	29	40	51	48	25	24	9	—9	—22
Flora	17	—25	—21	—2	22	29	38	50	47	25	21	6	—9	—25
Golconda	21	—8	—16	3	24	31	43	53	48	32	25	12	—13	—16
Greenville	21	—13	—21	—2	23	30	36	46	45	30	19	5	—16	—21
Halfway	12	—6	—18	3	24	34	42	55	53	30	29	14	—10	—18
McLeansboro	19	—11	—19	2	22	32	44	50	46	29	24	—2	—10	—19
Mascoutah	21	—20	—20	1	21	29	40	50	47	24	22	9	—15	—20
Mt. Vernon	14	—8	—22	0	20	29	41	50	49	23	22	10	—7	—22
New Burnside	14	—7	—20	3	21	31	44	51	49	25	17	9	—10	—20
Olney	21	—17	—20	1	23	30	38	49	48	27	21	2	—8	—20
Palestine	19	—19	—21	—1	22	28	38	48	46	28	22	6	—8	—21
St. John	17	—11	—21	2	22	29	35	51	49	27	25	10	—15	—21
St. Louis, Mo.	38	—22	—18	3	22	32	44	55	52	37	24	5	—14	—22
Tilden	20	—10	—23	1	20	28	41	50	46	22	20	9	—17	—23
Vernon	8	—22	—19	7	23	28	41	48	41	20	24	8	—14	—22

Section 66—Southern Illinois.

Prevailing Wind Direction.

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Cairo	37	S.	N.	S.	S.	S.	S.	S.	S.	S.	S.	N.	S.	S.
St. Louis, Mo.	38	NW.	NW.	S.	SE.	S.	S.	S.	S.	S.	S.	S.	S.	S.

Section 66—Southern Illinois.

Highest Temperature.

Stations	Length of record—Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Albion	16	72	69	83	90	95	103	109	108	102	92	79	73	109
Benton	6	71	70	88	88	95	100	102	101	100	96	84	68	102
Cairo	37	74	75	85	89	92	98	106	103	97	90	80	74	106
Cobden	13	73	76	86	90	95	103	112	105	105	95	83	72	112
Equality	10	75	72	92	94	95	104	112	108	102	92	82	74	112
Fairfield	14	73	74	89	92	95	102	113	103	101	94	79	70	113
Flora	17	72	73	86	90	92	100	108	103	101	96	79	71	108
Golconda	21	74	76	86	90	95	100	108	103	101	92	82	74	108
Greenville	21	73	75	88	92	95	102	113	106	102	95	79	71	113
Halfway	12	72	69	85	90	92	102	110	106	102	95	81	68	110
McLeansboro	19	74	75	85	93	96	105	110	109	102	93	80	72	110
Macoupin	21	71	74	85	94	95	103	109	108	104	90	82	76	109
Mt Vernon	14	72	73	92	91	96	100	112	107	104	94	80	70	112
New Burnside	14	73	75	86	95	97	104	112	104	104	94	79	70	112
Olney	21	72	72	87	89	96	101	109	103	101	93	78	70	109
Palestine	19	70	68	85	88	95	100	105	100	101	92	79	70	105
St John	17	73	73	87	92	97	101	112	111	100	94	83	76	112
St Louis, Mo	38	74	78	90	94	94	102	107	106	102	91	82	74	107
Tilden	20	77	78	86	89	93	104	111	107	105	94	80	72	111
Vernon	8	72	68	87	89	93	103	112	106	98	91	80	68	112

Section 66—Southern Illinois.

Mean Relative Humidity.

Stations.	Length of record Years	Jan.	Feb.	Mar	Apr	May.	June	July	Aug	Sept	Oct.	Nov.	Dec.	Annual.
Cairo, 8 A. M.	21	82	80	77	74	79	82	81	85	81	83	80	81	81
Cairo, 8 P. M.	21	73	71	67	61	66	69	69	71	71	66	66	72	69
St. Louis, Mo., 8 A. M.	21	80	78	77	72	76	76	75	77	78	77	76	82	77
St. Louis, Mo., 8 P. M.	70	70	66	67	59	62	61	59	59	61	58	61	69	63

Average Hourly Wind Movement (in Miles).

Stations.	Length of record Years.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual.
Cairo	18	9.7	10.6	11.3	10.2	8.3	6.9	6.2	5.8	6.3	7.1	8.9	9.7	8.4
St. Louis, Mo	18	11.5	11.5	12.1	11.6	10.2	9.1	8.3	7.9	8.9	9.9	11.0	11.3	10.3

Section 66—Southern Illinois.

Frost Data.

Stations.	Length of record—Years.	Average date of first killing frost in autumn.	Average date of last killing frost in spring.	Earliest date of killing frost in autumn.	Latest date of killing frost in spring.
Albion	15	Oct. 21	Apr. 14	Oct. 30	May 14
Benton	7	Oct. 21	Apr. 21	Oct. 12	May 2
Cairo	38	Oct. 28	Mar. 30	Sept. 30	Apr. 19
Cobden	13	Oct. 21	Apr. 12	Sept. 30	Apr. 21
Equality	10	Oct. 22	Apr. 14	Sept. 30	Apr. 15
Fairfield	12	Oct. 16	Apr. 16	Sept. 19	Apr. 21
Flora	16	Oct. 11	Apr. 18	Sept. 15	May 14
Golconda	20	Oct. 26	Apr. 6	Sept. 30	Apr. 21
Greenville	21	Oct. 15	Apr. 15	Sept. 19	May 6
Halfway	11	Oct. 26	Apr. 5	Sept. 30	Apr. 21
McLeansboro	12	Oct. 14	Apr. 17	Sept. 19	May 5
Mascoutah	11	Oct. 14	Apr. 22	Sept. 19	May 7
Mt. Vernon	14	Oct. 15	Apr. 20	Sept. 15	May 14
New Burnside	14	Oct. 12	Apr. 17	Sept. 23	May 14
Olney	15	Oct. 16	Apr. 21	Sept. 30	May 14
Palestine	18	Oct. 12	Apr. 18	Sept. 19	May 14
St. John	12	Oct. 16	Apr. 12	Sept. 18	May 1
St. Louis, Mo	35	Oct. 27	Apr. 3	Sept. 30	May 22
Tilden	16	Oct. 14	Apr. 13	Sept. 14	May 7
Vernon	8	Oct. 7	Apr. 23	Sept. 14	May 7
		Oct. 18	Apr. 14	Sept. 23	May 4

Monthly and Annual Mean Precipitation for the Year 1909, with Departures from the Normal.

Stations.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
THERN DISTRICT.																										
.....	1 32	.....	2 34	.....	1 61	.....	4 00	.....	4 19	.....	3 36	.....	4.10	.....	0.44	.....	3.04	.....	2.23	.....	4.79	.....	3.66	.....	35.08	.....
ch.....	2 20	.....	1 60	.....	0 06	.....	1 68	.....	1 05	.....	2 60	.....	1.15	.....	6.55	.....	3.62	.....	0.61	.....	3.23	.....	3.50	.....	34.79	.....
on.....	2 16	+0 48	2 14	+0 25	1 49	−1 27	7 15	+4 53	2 73	−1 88	4 47	+0 90	1.02	−2 77	3.75	−0 06	1.96	−1 10	1.45	−0 42	.....	.....	.....	.....	.....	.....
ra.....	1 43	−0 71	2 17	0 00	1 34	1 20	8 38	+5 45	2 64	−1 56	4 71	+0 71	0.48	−2 79	2.92	−0 52	3.28	−0 11	1 25	−1 22	4.33	+1 76	3.43	+1 36	36.76	+1 11
ridge.....	.....	.....	.....	.....	1 36	−1 51	4 48	+1 73	4 16	+0 43	2 73	−0 87	3.43	−0 58	1.28	−2 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
go.....	1 96	−0 04	2 84	+1 68	1 63	0 92	7 73	+4 85	2 18	−1 19	5 09	+1 43	1.77	−1 87	6 20	+3 32	3.60	+0 58	1 20	−1 35	3.84	+1 34	4.18	+2 11	43 22	+9 94
ta.....	2 65	.....	1 49	.....	1 18	.....	8 29	.....	3 39	.....	4 17	.....	1.37	.....	7.49	.....	2.23	.....	0.79	.....	3.77	.....	3.53	.....	40.35	.....
nport, Iowa.	1 72	+0 15	2 34	+0 78	1 60	0 61	6 02	−3 14	3 23	−0 96	2 80	−1 31	4 68	+1 13	2.34	−1 30	1.50	−1 64	2 37	−0 02	3.92	+2 16	3.12	+1 43	35 64	+2 95
a.....	2 78	+0 60	1 99	+0 25	1 16	−1 42	6 40	+3 70	4 34	−0 66	5 72	+2 11	1.51	−2 59	1.13	−1 90	2 81	−0 49	2 42	+0 45	2.59	+0 97	.....	.....	.....	.....
que, Iowa . .	1 98	+0 49	1 21	0 06	1 27	0 96	7 40	+4 48	2 32	−2 00	6 61	+2 66	1.30	−3 00	1.50	−1 54	4 28	+0 69	2 03	−0 65	2.91	+1 13	2.08	+0 36	35 01	+1 00
ht.....	1 73	−0 48	4 29	+2 08	1 79	−1 04	7 13	+4 51	2 48	−1 02	6 06	+2 06	1 50	−2 03	3.53	+0 89	2 34	−0 30	2 38	+0 70	4.24	+1 50	2.96	+1 22	40 43	+8 15
a.....	1 17	−0 61	3 65	+2 03	1 58	−0 96	4 08	+1 08	3 32	−0 74	2 98	−0 68	4 74	+0 95	0.90	−2 54	2 85	−0 54	2 60	+0 70	5.39	+3 55	3.64	+2 10	36 90	+4 34
y.....	1 44	−0 48	3 55	+1 81	1 70	−0 65	7 11	+3 95	3 41	−0 76	3 77	−0 49	3 81	+0 09	3.93	+0 89	3.93	+0 67	2.48	+0 48	4 66	+2 23	3.20	+1 35	43 05	+9 09
.....	1 12	−0 94	3 58	+1 44	1 56	−1 43	6 60	+4 08	3 46	−0 40	3 80	+0 39	1 69	−1 99	2.95	−0 47	3 09	−0 49	1 68	−0 18	4.55	+2 18	3 50	+1 36	37 38	+3 55
vaukee.....	1 91	−0 37	1 83	−0 28	0 93	−1 75	5 96	+2 78	1 39	+0 28	3 90	−0 31	1 25	−2 34	6.41	+2 95	3 59	+0 53	0 84	−1 78	4 11	+1 85	3 23	+1 21	38 35	+2 77
ville.....	1 50	−0 30	3 24	+1 16	1 76	−1 04	4 47	−1 54	4 03	+0 10	2 56	−0 91	7 41	+3 24	0.98	−3 11	3 63	−0 12	3.52	+1 24	5.52	+3 46	4.18	+2 23	42 89	+7 64
range.....	1 68	−0 29	3 73	+1 74	1 42	−0 12	8 22	+5 52	2 54	−1 13	6 33	+2 14	1 28	−2 73	6.45	+2 74	3 26	−0 51	1 24	−0 24	4 65	+1 68	4.12	+2 32	44 32	+11 12
rk.....	3 58	+1 80	1 67	+0 33	1 14	−1 19	7 23	+4 05	2 46	−2 08	6 40	+2 14	1 53	−2 76	1.92	−1 52	1 81	−1 51	1 64	−0 44	4 37	+2 37	2 57	+0 88	36 32	+2 26
lle.....	1 28	−0 88	3 96	+0 62	1 40	−1 42	5 93	−2 83	3 05	−0 87	2 33	−1 60	2 52	−0 75	4 00	+1 14	3 15	−0 05	1 53	−1 05	3 82	+1 18	3 64	+1 36	35 71	+0 45
nton.....	2 30	+0 26	4 30	+2 09	2 00	−0 74	9 00	+1 67	2 95	−1 78	4 27	+0 49	2 45	−0 96	7 31	+3 83	3 82	+0 48	3 35	+1 23	5 53	+2 97	4.10	+1 56	47 37	+11 13
nk.....	1 62	−0 23	3 50	+1 45	1 68	−0 98	5 62	+2 80	2 56	−1 24	3 31	+0 16	1 98	−1 19	3.32	+0 12	1 98	−1 66	2 43	+0 91	3 83	+1 79	2 90	+1 13	34 73	+3 12
outh.....	1 54	−0 48	3 06	+1 46	2 02	−0 39	3 92	+0 84	3 34	−0 62	3 99	+0 16	5 06	+0 64	0 38	−3 61	3 68	−0 52	3 77	+2 00	5 98	−4 12	3 88	+2 28	40 62	+5 88
son.....	2 42	+0 67	2 43	+0 64	1 60	−1 45	6 41	+3 14	3 58	−1 34	5 57	+1 61	3 59	−1 56	3 14	−0 69	2 60	−0 89	2 22	+0 25	4 50	+2 71	3 72	+2 23	41 78	+5 32
on.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6 45	.....	4 73	.....	2 79	.....	1 00	.....	5 07	.....	3 68	.....	.....	.....
va.....	0 98	−1 27	3 65	+1 56	1 64	−1 23	5 19	+2 27	2 57	−1 63	3 69	+0 04	2 95	−0 95	3.59	+0 40	4 08	+0 67	1 71	−0 40	2 57	+0 15	3 02	+1 01	35 64	+0 62
ac.....	2 58	.....	4 30	.....	1 81	.....	5 90	.....	3 05	.....	2 90	.....	2 29	.....	3 75	.....	2 15	.....	2 33	.....	4 00	.....	3 32	.....	38 44	.....
.....	2 50	+0 59	2 58	+0 85	1 10	−1 39	7 70	+5 03	1 62	−2 03	3 37	−0 67	0 63	−2 90	6 25	+2 83	3 37	−0 36	0 72	−1 49	3 91	+1 94	5 05	+3 22	38 80	+5 62
ford.....	2 79	+0 21	2 31	+0 05	1 13	−1 47	6 01	+2 90	4 78	+0 62	3 81	−0 43	0 68	−2 99	7 69	+4 28	3 41	+0 47	0 75	−1 99	4 15	+1 71	3 48	+1 40	40 99	+4 76
harles.....	1 38	−0 65	2 74	+0 27	1 32	−2 21	7 14	+4 17	2 46	−1 68	5 50	+2 02	0 33	−3 72	6 58	+2 68	3 59	−1 11	0 99	−0 92	5 27	+2 82	4 44	+2 36	41 74	+4 03

Monthly and Annual Mean Precipitation—Concluded.

Stations.	Jan. Precipitation.	Jan. Departure.	Feb. Precipitation.	Feb. Departure.	Mar. Precipitation.	Mar. Departure.	Apr. Precipitation.	Apr. Departure.	May. Precipitation.	May. Departure.	June. Precipitation.	June. Departure.	July. Precipitation.	July. Departure.	Aug. Precipitation.	Aug. Departure.	Sept. Precipitation.	Sept. Departure.	Oct. Precipitation.	Oct. Departure.	Nov. Precipitation.	Nov. Departure.	Dec. Precipitation.	Dec. Departure.	Annual Precipitation.	Annual Departure.
tor	1.37	—0.68	3.45	+1.71	1.81	1.45	6.61	+3.80	2.76	—0.68	4.79	+1.52	2.60	—1.61	3.31	+0.23	2.74	—0.60	2.21	+0.76	3.73	+1.35	2.85	+1.07	38.23	+5.42
nore	1.72	—0.19	1.97	+0.00	1.60	—0.90	1009	+6.77	2.97	—1.20	3.27	1.04	0.62	—3.13	7.08	+3.53	3.95	+0.51	1.19	—1.36	5.42	+3.01	5.27	+3.24	45.15	+9.19
lwa	1.52	0.56	3.19	+1.15	1.81	1.17	1.75	+1.58	3.82	0.51	3.32	—0.42	3.02	—1.24	4.50	+0.33	3.99	0.50	2.56	+0.62	3.67	+1.47	1.66	+2.73	40.81	+3.48
n(	1.66	—0.28	3.91	+2.01	1.06	—1.86	5.94	+3.08	3.14	1.33	3.09	+0.73	1.83	—2.35	3.09	—0.30	2.41	1.47	2.09	+0.48	5.24	+3.34	4.37	+2.76	37.83	+3.35
ebago	2.52	+0.53	2.63	+0.86	1.41	—1.37	7.75	+4.44	3.47	—0.81	4.52	+0.44	1.03	—2.80	6.82	+3.31	2.18	—1.30	1.11	—1.09	4.00	+1.90	1.32	+2.45	41.76	+6.56
ville	1.06	—0.90	1.76	—0.34	0.85	—1.53	8.41	+5.55	2.21	—2.00	5.21	+1.20	2.24	—1.33	2.09	—1.17	3.32	—0.24	1.41	0.90	4.82	+2.38	1.46	—0.30	34.78	+0.42
	2.10	+0.44	1.25	—0.16	0.85	—1.32	4.13	+1.55	3.20	—1.25	4.73	+0.91	0.43	—3.54	2.24	—0.89	1.05	—2.23	2.22	+0.21	4.92	+3.09	4.30	+2.77	31.42	—0.39
verages	1.88	—0.13	2.79	+0.92	1.58	—1.20	6.48	+3.48	3.08	—1.03	4.15	+0.42	2.19	—1.63	3.90	+0.38	3.00	—0.44	1.81	—0.18	4.32	+2.14	3.62	+1.76	38.83	+4.49
TRAL DISTRICT.																										
nder	2.10	—0.16	3.81	+1.78	1.03	—1.63	4.19	+1.43	6.14	+1.90	2.24	—1.52	6.11	+2.12	0.66	—2.57	3.89	+0.58	3.57	+1.72	4.54	+2.43	1.50	—0.50	39.78	+5.58
ia	2.10	......	3.81	......	1.98	—0.81	5.98	+2.42	5.15	+1.45	6.51	......	4.73	+1.03	2.18	—1.34	4.03	+0.45	2.74	+0.93	4.19	+2.31	2.46	+0.59	45.86	......
lstown	....	......	3.61	......	1.60	......	4.84	......	4.56	......	2.74	......	6.09	......	....	......	....	......	....	......	....	......	....	......	......	......
nt	3.08	......	4.86	......	1.18	......	7.85	......	6.51	......	2.42	......	7.20	......	3.86	......	3.36	......	2.82	......	2.98	......	1.95	......	48.07	......
nington	1.77	—0.44	5.09	+2.80	1.78	—1.39	5.94	+2.16	3.79	—0.91	4.63	+0.73	3.15	+0.71	2.51	—0.21	2.35	—1.11	2.98	+1.37	4.28	+1.64	2.01	—0.26	40.28	+3.67
nell	2.12	+0.13	1.95	+0.63	1.38	—1.39	5.43	+2.33	....	......	....	......	....	......	....	......	....	......	....	......	....	......	....	......	......	......
ville	2.58	+0.25	4.04	+1.30	1.87	—1.20	6.02	+2.12	4.75	+0.47	4.65	+0.26	5.41	+1.56	0.47	—2.45	1.76	+1.41	3.15	+0.78	3.76	+1.10	1.99	—0.41	43.45	+5.13
eston	2.21	—0.12	4.59	+1.45	2.05	—1.40	7.83	+4.54	3.24	—0.74	4.01	—0.32	9.05	+5.18	1.12	—1.75	3.35	+0.49	2.80	+0.22	3.14	—0.13	2.63	+0.24	46.05	+7.66
burg	1.68	—0.69	3.39	+1.42	2.13	—0.87	5.89	+2.14	7.46	+3.28	2.92	—1.50	5.91	+1.84	0.98	—2.50	4.90	+0.53	2.94	+0.52	3.54	+1.41	2.36	+0.59	44.10	+6.17
ester	2.91	......	3.15	......	1.54	......	5.38	......	3.44	......	....	......	....	......	....	......	....	......	....	......	....	......	....	......	......	......
ur	2.43	—0.05	4.31	+2.10	1.27	—2.07	5.58	+2.53	5.30	+1.33	3.14	—0.50	6.18	+2.76	2.20	—0.94	2.79	—0.53	3.59	+1.55	3.13	+0.64	2.40	+0.16	42.32	+6.98
on	2.04	—0.53	3.64	+1.37	2.52	—1.12	5.53	+2.00	5.40	+1.15	3.90	+0.04	6.08	+2.06	1.28	—1.74	4.17	—0.78	3.92	+0.99	6.74	+4.30	2.06	—0.49	47.28	+8.81
sville	1.81	—0.37	2.25	—0.09	1.53	—1.24	4.47	+0.83	7.50	+2.61	3.27	—0.95	4.11	+0.69	0.33	—2.40	4.64	+0.73	4.36	+2.13	3.30	+1.07	1.21	—0.47	38.78	+2.54
ibal, Mo	1.95	—0.25	3.95	+2.35	1.65	—1.11	4.78	+1.53	7.63	+2.63	2.15	—1.37	4.73	+0.98	0.09	—3.29	3.52	—0.04	4.48	+2.84	2.72	+0.77	2.72	+1.07	40.37	+6.11
na	1.55	—0.67	3.85	+1.78	1.80	—1.26	5.39	+2.13	4.64	+0.92	5.68	+1.76	4.84	+0.58	1.95	—1.18	5.68	+1.89	3.13	+1.29	3.61	+1.45	2.13	+0.06	44.25	+8.75
boro	2.30	—0.24	4.85	+2.45	2.78	—0.79	7.81	+4.46	4.33	—0.27	3.79	—0.35	6.25	+2.29	1.04	—2.27	6.45	+3.14	3.79	+1.07	6.23	+3.52	2.16	—0.41	51.78	+12.60
eston	2.87	......	6.88	......	1.76	......	6.45	......	4.24	......	4.18	......	6.07	......	5.28	......	2.33	......	2.10	......	3.47	......	3.61	......	49.24	......
uk, Iowa	1.26	—0.43	2.44	+0.82	1.84	—0.53	4.99	+1.65	3.03	—1.22	5.11	+0.76	5.46	+1.43	0.68	—2.56	3.40	—0.51	4.48	+1.99	3.97	+2.12	2.56	+0.69	39.28	+4.21
rpe	1.35	—0.89	3.32	+1.40	2.09	—0.84	3.52	—0.08	4.87	+0.35	7.15	+2.75	6.18	+1.66	3.31	—0.48	4.68	+0.56	3.52	+1.02	3.61	+1.60	2.92	+0.57	46.52	+7.62
ln	2.29	0.00	1.84	—0.30	1.55	—1.44	5.04	+2.20	....	......	....	......	....	......	....	......	....	......	3.10	+1.25	4.22	+1.85	2.86	+0.75	......	......
i	2.57	......	4.89	......	1.12	—1.49	6.08	+3.03	3.65	+0.09	2.40	—1.21	4.95	+1.25	1.23	—2.58	2.82	—0.14	3.83	+1.88	4.14	+2.05	1.31	—0.45	38.99	......
nsville	2.76	+0.24	3.10	+0.74	1.65	—1.71	6.47	+3.13	6.99	+2.78	6.61	+2.67	9.43	+5.73	1.03	—2.10	2.88	+0.27	3.19	+1.37	4.65	+1.31	3.03	+0.80	51.79	+15.23

risonville	1.66	......	3.79	......	1.55	-1.47	5.88	+2.61	5.52	+2.24	2.48	......	6.77	+2.61	0.40	-2.44	3.39	+0.61	3.37	+1.06	2.74	+0.65	1.47	-0.67	39.02	......
stine	....	......	....	......	4.51	+0.18	3.47	-0.12	3.18	0.49	6.42	+2.36	5.24	+1.61	0.73	-2.88	1.83	-1.18	3.11	+0.71	3.70	+0.01	3.61	+0.76	......	......
a	2.72	+0.12	5.05	+2.05	1.68	-1.71	6.25	+2.53	3.96	-0.41	3.71	-0.45	8.82	+4.84	1.74	-1.61	3.73	+0.35	3.20	+0.78	4.48	+1.11	2.53	-0.19	47.87	+7.41
s	2.76	+0.42	5.18	+2.86	2.40	-0.74	6.67	+3.14	3.78	-0.18	4.66	+1.02	4.96	+1.69	1.18	-1.35	3.14	+0.28	3.25	+1.30	3.24	-0.12	2.92	+0.48	44.14	+8.80
ia	1.55	-0.65	3.67	+0.98	1.81	-1.15	7.17	+3.89	3.72	-0.54	3.56	-0.74	4.57	+1.60	0.79	-2.14	3.68	+0.56	3.59	+1.02	5.53	+2.89	2.50	+0.13	42.14	+5.85
o	2.54	+0.18	5.11	+2.70	1.23	-1.81	7.73	+4.40	2.83	1.21	3.80	-0.02	8.16	+4.28	2.88	+0.03	2.68	-0.21	3.21	+1.10	2.96	-0.16	2.37	+0.12	45.50	+9.40
toul	2.18	+0.04	5.31	+3.23	1.57	-1.49	7.64	+4.08	3.75	-0.71	3.77	-0.55	3.27	-0.64	1.81	-1.46	2.36	-1.03	2.40	+0.58	3.51	+0.79	2.36	+0.22	39.96	+3.06
inson	3.00	......	5.66	......	3.80	......	3.55	......	3.96	......	8.75	......	8.04	+3.59	0.80	-2.98	3.85	+0.84	3.18	+0.56	3.86	+0.97	2.90	-0.49	51.35	......
nville	2.02	......	2.70	......	1.02	......	5.16	......	5.56	......	3.51	......	3.99	......	0.81	-2.47	3.99	+0.11	2.92	+1.23	2.57	+0.41	2.32	+0.58	36.57	......
ngfield	2.03	-0.22	4.34	+1.57	1.10	-1.97	5.34	+2.03	5.91	+1.42	4.11	-0.20	6.47	+3.57	1.62	-1.18	3.67	+0.30	2.76	+0.16	3.70	+1.04	1.47	-0.96	42.52	+5.56
ntou	2.59	......	2.77	......	2.64	......	6.94	......	4.90	......	2.98	......	2.70	......	0.3[illegible]	......	4.81	......	3.41	......	5.49	......	....	......	......	......
van	2.47	......	5.21	......	1.75	......	10.74	......	4.89	......	5.14	......	5.58	......	1.30	......	4.37	+1.87	3.39	+0.99	3.34	+0.89	2.36	+0.04	50.54	......
ola	3.10	+0.75	4.51	+2.34	1.25	-2.24	7.94	+4.38	3.88	+0.21	3.70	-0.05	4.42	+0.68	2.29	-1.03	3.10	-0.01	3.28	+1.16	2.89	+0.34	2.74	+0.11	43.10	+6.64
ana	2.17	......	5.80	......	1.76	......	7.44	......	5.58	......	3.75	......	7.57	......	2.37	......	2.36	......	2.25	......	3.45	......	2.55	......	47.05	......
saw	1.23	-1.02	2.58	+0.51	2.04	-0.39	4.80	+1.10	4.01	-1.12	6.19	+1.27	5.66	+0.72	0.15	-2.97	4.35	+1.22	3.72	+0.71	4.73	+2.02	2.17	+0.48	41.63	+2.53
te Hall	3.28	......	4.33	......	1.50	......	4.45	......	5.62	...	4.18	......	6.02	......	1.48	......	4.74	......	5.48	......	5.85	......	2.38	......	49.31	......
dsor	2.42	-0.32	4.16	+1.89	1.94	-1.32	9.23	+5.97	5.49	-0.04	3.95	-0.13	6.80	+2.72	1.20	-2.39	2.94	-0.23	2.76	+0.84	3.73	+0.87	2.25	-0.31	46.87	+7.55
Averages	2.26	-0.20	4.05	+1.61	1.84	-1.26	6.05	+2.57	4.84	+0.56	4.23	+0.15	5.86	+2.06	1.49	-1.90	3.57	+0.40	3.33	+1.13	3.94	+1.33	2.36	+0.09	43.82	+6.54
THERN DISTRICT.																										
on	2.53	-0.61	5.36	+2.87	3.59	-0.92	4.91	-1.47	3.34	-1.05	7.28	+2.96	4.93	+0.92	1.01	-2.26	4.62	+1.74	2.68	+0.55	3.10	-0.48	3.28	-0.02	46.63	+5.17
on	3.90	......	5.77	......	5.65	......	6.54	......	4.00	......	1.60	......	12.45	......	0.15	......	5.62	......	....	......	3.30	......	2.80	......	......	......
o	2.54	-1.28	6.76	+3.43	7.10	+3.08	4.85	-1.28	3.96	-0.13	1.88	-2.43	3.13	-0.32	0.01	-2.92	5.66	+3.19	0.74	-1.89	2.58	-1.44	3.84	+0.51	43.05	+1.34
yle	2.76	-0.01	4.81	+2.25	3.70	-0.39	6.77	+2.77	4.33	+0.09	5.43	+0.71	4.55	+0.75	T.	-2.87	4.25	+1.24	4.33	+2.20	6.00	+2.55	3.41	+1.03	50.34	+10.32
ter	2.83	......	4.07	......	5.21	......	7.23	......	4.58	......	2.90	......	7.25	......	0.09	......	8.78	......	1.58	......	3.76	......	3.18	......	51.46	......
len	2.25	-1.34	8.26	+4.57	5.39	+0.41	9.08	+4.81	4.33	-0.31	1.75	-3.28	10.93	+6.77	1.39	-2.32	9.17	+5.84	0.86	-2.28	4.31	-0.06	3.14	-0.53	60.86	+12.31
noin	5.80	+3.25	4.63	+1.82	4.90	+0.53	5.43	+1.72	3.86	-0.01	1.34	-2.33	8.72	+4.41	0.17	-2.42	5.71	+3.16	0.84	-1.08	3.13	+0.12	3.71	+0.98	48.24	+10.15
ality	3.48	-0.71	6.14	+2.88	3.98	-0.79	6.29	+2.68	3.08	-0.55	2.56	-1.12	8.19	+4.27	0.46	-3.01	2.55	-0.29	1.98	-0.69	3.83	+0.51	3.86	+0.34	46.40	+3.52
field	3.02	+0.11	6.83	+4.56	3.91	-0.53	6.18	+3.08	3.17	-0.72	3.95	+0.01	5.35	+1.36	1.05	-2.05	4.10	+1.07	1.86	-0.24	3.60	+0.30	2.34	-0.51	45.36	+6.44
a	2.46	-0.65	4.40	+1.64	5.55	-1.60	4.79	-1.06	4.08	+0.01	5.59	+1.02	6.57	+2.14	0.09	-3.35	5.79	+2.86	4.50	+2.20	4.28	+0.85	2.45	-0.36	50.55	+9.02
onda	2.78	-0.99	9.94	+5.99	5.89	-1.29	7.05	+3.21	4.23	+0.04	3.93	-0.15	4.09	+0.64	0.08	-3.00	5.15	+1.99	1.39	-1.26	4.58	+0.30	5.23	+1.66	54.34	+9.72
nville	2.46	-0.42	5.83	+2.62	1.35	-2.45	6.79	-2.66	4.79	+0.01	4.85	-0.09	4.45	+0.86	1.55	-1.42	6.21	+2.92	4.54	+1.88	5.09	+1.62	2.36	-0.47	50.27	+7.72
way	2.71	-0.33	6.40	+3.59	4.17	-0.01	9.06	+5.70	3.75	+0.56	2.75	-1.04	6.44	+3.38	0.95	-1.48	4.68	+1.55	0.86	-0.98	3.51	+0.77	3.28	-0.12	48.56	+11.59
eansboro	3.08	-0.10	6.63	+3.25	4.13	-0.15	6.55	+2.97	3.66	-0.29	3.13	-0.90	6.34	+3.12	0.31	-3.14	3.72	+0.83	1.52	-0.59	3.44	-0.14	3.58	+0.52	46.09	+5.38
coutah	3.04	+0.26	4.13	+0.94	4.40	+0.20	5.62	-1.49	4.48	-0.42	2.90	-1.25	7.63	+4.29	0.07	-2.59	4.16	+0.81	3.22	+1.06	4.56	+1.25	2.68	+0.36	46.89	+6.40
Carmel	3.20	-0.82	6.06	+2.58	3.99	-0.98	5.90	+2.21	4.42	+0.62	5.69	+1.41	4.54	+1.43	3.88	+0.75	3.16	+0.12	3.74	+1.30	2.60	-1.18	4.88	+1.47	52.06	+8.91
Vernon	3.82	+0.70	5.17	+2.33	4.98	-0.30	7.50	+4.06	4.45	-0.36	7.13	+2.79	4.03	-0.06	0.30	-2.44	3.72	+0.62	1.55	-0.56	3.23	+0.22	2.81	+0.07	48.69	+7.79
Burnside	2.60	-0.97	5.35	+2.37	3.92	-0.91	5.45	+1.61	4.01	-0.09	4.67	+0.98	3.28	-1.13	0.15	-2.41	5.47	+2.57	0.83	-1.75	4.09	+0.47	3.06	-0.21	42.88	+0.53
y	2.77	-0.03	6.42	+3.51	3.80	-0.73	3.44	-0.27	3.52	-0.18	5.57	+2.07	5.03	+1.30	0.81	-1.88	3.94	+1.11	3.60	+1.51	4.13	+0.56	3.28	+0.47	46.31	+7.44
Louis, Mo	3.20	+0.93	3.94	+1.19	3.69	+0.26	6.18	+2.66	5.99	+1.75	2.63	-1.84	7.31	+3.91	0.66	-2.00	4.22	+1.31	3.40	+0.99	4.36	+1.48	1.89	-0.34	47.50	+10.30
ner	3.17	......	6.41	......	4.37	......	3.50	......	3.56	......	7.38	......	3.56	......	0.47	......	2.88	......	3.18	......	3.67	......	3.10	......	45.25	......
en	2.95	+0.44	4.27	+1.59	3.96	-0.21	7.53	+3.56	3.97	+0.04	3.76	+0.13	6.14	+2.69	0.07	-3.12	5.47	+2.22	1.97	-0.36	5.56	+1.96	2.86	+0.38	48.51	+9.32
Averages	3.06	-0.14	5.80	+2.79	4.44	-0.05	6.21	+2.57	4.07	0.00	4.03	-0.12	6.13	+2.14	0.62	-2.31	4.96	+1.83	2.34	0.00	3.94	+0.51	3.23	+0.28	48.83	+7.50
State averages	2.31	-0.15	4.00	+1.63	2.34	-0.94	6.24	+2.93	4.01	-0.22	4.15	-0.45	4.52	-0.62	2.22	-1.11	3.69	+0.43	2.54	+0.37	4.08	+1.43	3.01	+0.73	43.11	+5.26

Monthly and Annual Mean Precipitation for the

Stations.	Jan.		Feb.		Mar.		Apr.		May.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
NORTHERN DISTRICT.										
Aledo	24.8	.....	31.1	.....	36.2	.....	47.8	.....	58.6	.....
Antioch	25.1	.....	29.3	.....	33.4	.....	42.3	.....	56.0	.....
Ashton	25.4	+3.0	29.6	+9.1	d33.7	—0.8	e45.0	—2.6	57.8	—1.9
Aurora	26.4	+5.4	30.1	+7.5	34.6	0.0	45.2	—2.7	57.0	—2.1
Cambridge	.....	.....	.....	.....	.....	.....	44.6	—5.4	57.0	—5.1
Chicago	28.8	+5.1	32.4	+7.0	36.0	+1.6	45.1	—0.8	55.9	—0.6
Dakota	22.9	.....	26.6	.....	32.8	.....	e43.6	.....	56.0	.....
Davenport, Iowa	24.9	+4.1	31.0	+7.2	35.8	+0.4	46.8	—3.4	59.2	—2.3
Dixon	a24.2	+3.5	28.8	+7.7	b34.5	—0.3	45.8	—2.8	58.1	—1.6
Dubuque, Iowa	21.4	+3.1	26.9	+5.3	32.8	—0.4	43.4	—5.5	58.2	—2.6
Dwight	27.9	+1.4	32.7	+7.1	36.8	+0.4	48.4	—0.9	58.4	—2.7
Galva	24.2	+1.8	29.6	+8.1	35.2	—1.4	46.2	—3.3	58.3	—2.7
Henry	27.6	+4.3	32.7	+8.5	37.8	+0.9	49.4	—0.5	59.1	—2.2
Joliet	27.0	+2.4	31.2	+8.1	35.7	—1.2	46.6	—2.0	57.6	—3.2
Kishwaukee	a24.4	+3.9	28.2	+7.1	34.1	+0.3	44.0	—3.6	56.5	—1.6
Knoxville	25.6	+3.3	31.1	+8.2	66.8	+1.0	47.8	—2.2	57.6	—3.9
LaGrange	27.4	+4.1	31.0	+8.7	34.9	—0.5	45.2	—2.2	d55.0	—3.3
Lanark	22.2	+1.3	27.0	+6.1	33.0	—0.3	43.0	—4.5	56.0	—2.8
LaSalle	26.7	+1.4	31.8	+6.8	36.2	—0.6	47.3	—2.5	58.6	—2.2
Martinton	27.1	+3.0	31.6	+7.2	37.4	+0.8	47.2	—2.1	58.2	—2.3
Minonk	27.6	+3.5	33.0	+9.0	38.0	+0.4	49.5	—0.5	59.0	—3.4
Monmouth	25.5	+2.6	31.8	+9.0	37.4	—0.8	49.2	—1.7	60.6	—1.6
Morrison	24.6	+3.2	29.6	+8.9	35.7	+0.6	45.8	3.2	57.6	—2.6
Oregon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ottawa	27.2	+3.0	32.2	+7.5	37.1	+0.2	48.5	—2.0	59.8	—1.5
Pontiac	28.3	.....	33.6	.....	38.2	.....	50.5	.....	60.0	.....
Riley	24.6	+6.0	28.1	+7.0	b33.0	+1.7	a42.5	—3.2	56.0	—1.5
Rockford	b25.8	+4.2	b30.1	+6.3	34.4	+1.2	b43.9	—4.1	57.6	—0.8
St. Charles	26.4	+3.5	30.2	+8.5	34.8	—1.0	45.0	—2.5	57.2	—2.9
Streator	d27.2	+2.0	31.6	+8.3	37.1	—1.3	47.5	—2.2	59.7	—1.7
Sycamore	24.7	+1.9	29.4	+8.2	33.8	+0.7	43.7	—3.3	57.4	—0.8
Tiskilwa	26.3	+2.5	30.8	+9.0	35.8	—0.1	48.0	—1.0	58.5	—2.8
Walnut	26.6	+3.4	a31.6	+8.9	36.4	—1.0	48.7	—2.3	60.4	—1.8
Winnebago	23.6	+2.8	28.0	+7.5	33.2	—0.5	43.8	—3.8	56.6	—1.6
Yorkville	26.3	+4.6	30.4	+8.5	34.7	+0.4	45.6	—1.6	57.6	—0.5
Zion	21.9	+0.9	27.1	+6.9	32.6	—1.7	44.0	—4.1	56.8	—2.7
Averages	29.5	+3.4	30.3	+7.8	35.3	0.0	46.0	—2.7	57.8	—2.2
CENTRAL DISTRICT.										
Alexander	29.5	+2.0	34.7	+7.1	40.5	—0.6	52.4	0.5	60.6	—3.2
Astoria	26.8	.....	32.6	.....	38.0	—2.1	49.6	—0.7	59.0	—2.7
Bement	31.0	.....	37.9	.....	41.7	.....	52.2	.....	60.9	.....
Bloomington	28.2	+2.6	33.4	+7.8	38.2	—1.2	50.6	0.9	59.8	—3.3
Bushnell	a27.0	+1.6	33.2	+8.3	38.8	—0.6	50.4	—1.9	.....	.....
Carthage	30.1	+1.3	36.4	+7.2	42.6	+0.2	54.2	+0.2	62.0	—2.0
Charleston	32.1	+3.9	36.2	+7.0	41.2	+0.8	52.5	0.3	60.7	—2.6
Clarksburg	28.5	+3.2	e32.6	+6.1	39.6	0.0	52.0	0.3	a61.0	—2.8
Colchester	28.0	.....	33.0	.....	38.6	.....	51.4	.....	60.6	.....
Decatur	27.6	+1.0	33.9	+7.6	40.2	—0.6	50.2	—1.9	60.8	—2.5
Greggsville	29.7	+2.7	35.6	+7.2	40.9	0.0	53.0	—1.0	61.4	—2.7
Hannibal, Mo	29.4	+2.7	34.8	+5.7	40.0	1.6	51.7	—1.9	61.4	—3.0
Havana	28.8	+1.3	34.0	+6.3	40.0	1.7	52.2	—0.8	61.9	—2.0
Hillsboro	32.2	+1.6	37.6	+8.5	42.8	+0.2	51.9	—1.3	61.4	—3.4
Hoopeston	29.8	.....	33.5	.....	38.4	.....	50.0	.....	59.3	.....
Keokuk, Iowa	28.2	+4.5	34.1	+7.5	38.8	+0.9	50.6	—1.4	60.9	—2.3
LaHarpe	27.3	+3.4	31.4	+4.6	38.7	+0.5	49.6	—1.7	60.2	—2.6
Lincoln	a28.0	+6.7	33.0	+5.8	a38.5	—0.5	50.2	2.0	.....	.....
Martinsville	d31.4	+2.1	b37.2	+7.3	41.1	0.5	b52.6	—0.9	61.6	—2.4
Morrisonville	29.9	.....	35.4	.....	41.0	—1.6	52.0	+0.5	60.4	—2.8
Palestine	.....	.....	.....	.....	43.6	+1.5	a54.8	+0.9	62.2	—1.3

Illinois Section—Year 1909.

Year 1909, with Departures from the Normal.

June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
69 8	.....	71 8	.....	75 8	.....	62 9	.....	49 4	.....	47 6	.....	18 4	.....	49.5	.....
66 2	.....	70 5	.....	72 5	.....	60 9	.....	47 1	.....	44.4	.....	18 8	.....	47 2	.....
68 4	+0 4	71 4	1 3	75 0	+3 8	61 2	2 7	46 6	4 6	.....	.....	.....	.....	.....	.....
67 0	+0 9	70 4	2 7	73 2	+2 1	61 0	2 7	46 9	4 4	46 6	+9.1	17.6	− 8 5	48 0	0 1
71 0	− 1 9	73 2	−1 9	.....	+4 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
66 6	+0 3	72.3	−0 1	74 8	+3 6	64 0	−0 6	50 6	−2 6	48 5	+9 3	21 7	−7 6	49 7	+1.2
66 6	.....	70 6	.....	72.6	.....	60 8	.....	46 6	.....	43 9	.....	15 2	.....	46 5	.....
70.4	−0 5	72.6	−2 8	77.3	+4 3	63 6	−1 1	50 6	−2 0	46 5	+9 3	17.8	−9.4	49.7	+0.3
68 8	0 7	71 6	2 3	a75 9	+3 7	63 2	1 4	47 6	3 9	45 2	+8 2	.....	.....	.....	.....
68 7	−0 9	71 8	−2 9	75 0	+3 0	62 2	−1 4	48 4	−3 6	44 2	+8 2	16 6	−7 9	47 5	− 0 5
69 7	0 0	71 8	3 5	75 8	+2 8	63 4	1 2	49 1	3 1	48 2	+8 4	19 1	−9 0	50 1	0 0
70 6	+0 7	71 9	2 3	76.8	+1 1	63.4	2 1	48.6	4.3	46 4	+8 3	16.9	−8 5	49 0	0 1
70 8	+0 4	72 2	2 1	76 0	+3 5	63 2	2 2	a50 0	2 5	48 4	+9 5	19 2	8 9	50.5	+0.7
67 4	−2 0	70 9	−2 8	73 7	+1 9	61 8	−2 8	48 7	−3 3	46 8	+7 6	18 6	−8 6	48 8	0 5
67 8	0 7	70 9	2 1	76 8	+2 9	62 4	1 1	47 5	−3 6	45 4	+8 1	16 1	−9 6	47 6	0 0
70 0	0 0	71 0	3 5	75.4	+2 9	62 4	2 1	48 9	3 2	48 2	+9 2	18 3	8 4	49 1	+0 1
66 9	1 2	71 8	1 2	75 4	+1 0	62 1	2 0	47 0	1 8	46 1	+7 9	18 6	7 7	48 5	+0 2
66 5	−1 1	69 6	2 9	74 0	+3 6	61 3	1 3	46 6	−3 5	44 2	+7 9	14 8	10 0	46 5	0 6
69 6	0 5	71 8	3 5	75 6	+3 6	63 5	0 4	49 1	2 5	47 2	+9 1	19 0	−8 5	49 7	+0 3
70 7	+0 9	71 8	2 3	75 1	+3 3	61 7	3 1	49.4	3 1	48 1	+8 5	18 8	9 5	49 8	1 0 4
71 2	+1 1	72 2	2 5	77 0	+4 5	64 8	1 3	50 0	3 8	48 6	+8 6	19 6	−7 0	50 9	+0 7
72 8	+2 2	73.7	0 9	79 1	+5 9	65 1	1 0	50 8	2 7	48 7	+9 1	19 0	−7 9	51 2	+1 0
68 0	0 6	70 6	2 5	73 5	+1 6	61 0	−2 9	48 8	1 0	47 0	+8 5	17 0	−7 4	48 3	0 0
.....	.....	71 3	.....	74 2	.....	62 6	.....	48 3	.....	46 3	.....	15 8	.....	.....	.....
70 0	0 9	72 4	2 7	76 0	+3 6	63 0	2 3	49 8	3 2	47 8	+8 5	19 1	9 6	50 2	0 0
71 8	.....	73 2	.....	77 6	.....	65 2	.....	50 8	.....	49 8	.....	20 0	.....	51 6	.....
69 6	0 5	70 5	1 1	74 3	+3 9	61 4	0 2	47 1	1 6	a41 8	+10 3	16 6	6 6	47 0	+1 2
67 8	1 4	72 0	1 7	74 6	+2 1	60 7	2 8	46 7	3 4	43 6	+6 4	16 9	10 6	47 8	0 4
67 6	1 3	70 6	2 9	73 7	+2 7	61 8	2 4	48 2	4 6	46 2	+7 9	18 2	−7 3	48 3	0 4
70 0	+0 1	72 6	2 2	76 6	+3 4	64 6	1 9	49 8	3 8	47 2	+7 0	18 8	8 6	50 3	0 1
67 7	0 0	71 2	0 7	74 4	+1 6	61 6	−1 0	46 6	3 5	45 0	+8 8	16 8	−8 5	47 7	0 8
69 4	0 2	70 1	3 2	71 0	+1 8	62 2	2 7	49 1	3 0	47 6	+8 5	17 0	−8 7	49 1	0 0
71 5	+0 5	73 2	0 3	b77 2	+3 5	64 0	2 7	b50 2	4 3	47 2	+8 1	18 6	8 1	50 6	+0 3
67 9	−0 3	70 7	2 0	74 1	+3 3	61 0	1 8	47 3	3 3	44 8	+8 1	15 6	−9 5	47 3	−0 1
68 4	0 1	71 6	1 2	74 8	+1 2	62 0	−1 2	46 9	3 2	45 9	+9 4	16 8	−9 4	48 4	+0 8
67 6	0 4	69 2	1 5	71 3	+1 3	61 6	1 8	c48 6	2 7	45 8	+8 8	.....	.....	.....	.....
68 9	0 3	71 6	−2 1	75 1	+3 1	62 8	1 8	48	3 1	46 6	+8 3	17 9	8 6	49 2	+0 2
72 8	+0 7	73 2	1 0	78 0	+2 7	66 4	2 3	52 2	−3 5	51 2	+8 4	21 5	−9 0	52 4	−0 1
70 1	.....	70 6	3 1	74 8	+2 1	62 1	2 7	49 6	4 6	49 1	+7 8	20 3	5 3	50 2	.....
d72 8	.....	73 2	.....	77 8	.....	65 4	.....	50 6	.....	e51 8	.....	21 2	.....	53 0	.....
72 4	+0 6	71 2	2 4	77 4	+3 4	65 6	3 0	49 4	6 2	49 6	+8 0	20 5	−8 4	51 5	−0 2
73 4	+0 5	74 8	1 6	78 9	+4 9	68	3 0	53 7	2 5	54 1	+10 1	23 0	−9 1	54 1	+0 1
73 2	+0 5	73 1	0 3	76 6	+2 2	66 8	1 0	51 4	1 0	52 2	+9 8	24 1	−8 2	53 2	+0 2
72 8	+1 2	73 9	2 6	78 1	+2 5	64 8	2 9	51 5	0 9	50 6	+8 1	20 8	7 4	52 1	+0 1
72 9	+1 1	72 8	2 9	77 7	+2 9	65 1	2 9	50 7	1 8	50 8	+9 1	21 2	−8 9	52 0	−0 2
73 1	+0 8	74 6	2 0	f78 6	+4 1	66 1	1 6	52 6	−3 2	1b50 9	+8 8	22 2	9 0	53 3	+0 3
72 8	−0 5	74 3	3 1	79 0	+4 0	65 6	2 3	53 1	2 5	51 4	+10 9	22 2	−9 1	53 0	−0 1
74 2	+0 6	g74 9	2 2	80 2	+4 2	66 1	2 7	g52 2	1 7	51 2	+8 8	22 4	−8 4	53 2	−0 1
71 3	+1 4	74 4	2 4	79 0	+2 6	66 1	3 5	54 2	3 1	h55 0	+10.6	23 5	−8.3	54 4	+0 3
71 0	.....	71 0	.....	73 8	.....	63 2	.....	48 0	.....	50 1	.....	21 1	.....	50 8	.....
72 8	+0 3	73 6	−3 1	79 5	+4 9	65 7	0 7	52 5	2 1	50 2	+10.8	20 6	8 8	52 3	+0 9
71 2	0 2	72 8	3 6	77 0	+2 5	64 0	2 2	49 1	−5 0	50 0	+10.1	20.3	−7 6	51 0	−0 2
.....	.....	.....	.....	.....	.....	.....	.....	50 1	1 7	49 8	+8 3	21 5	9 5	.....	.....
g71 6	+1 9	g72 2	2 2	178 4	+3 5	166 5	1 1	52 5	2 9	52 4	+10 2	22.7	10 5	53 8	+0 1
72 0	.....	72 6	−2 0	76 6	+1 4	64 8	−3 1	51 8	−4 0	51 6	+7 9	22 0	−8 1	52 5	.....

Monthly and Annual Mean

Stations.	Jan.		Feb.		Mar.		Apr.		May.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Temperature.	Departure.	Departure.	Temperature.	Departure.
Paris	29.4	+0.8	34.4	+7.0	40.5	0.0	50.4	−0.6	60.6	−2.8
Peoria	26.3	+3.2	31.8	+5.9	36.8	−0.2	48.4	−2.5	48.4	−2.5
Philo	28.9	+3.0	32.6	+6.2	39.0	+0.2	50.6	−0.5	59.3	−2.4
Rantoul	29.8	+4.1	34.4	+10.1	39.8	+0.5	48.8	−1.6	59.2	−2.9
Robinson	35.4	.....	39.8	.....	43.2	.....	54.8	.....	62.4	.....
Rushville	28.6	.....	33.8	.....	39.7	.....	51.8	.....	60.9	.....
Springfield	29.1	+2.8	34.7	+5.6	40.2	+1.1	51.6	−0.4	61.6	−1.9
Staunton	31.2	.....	37.7	.....	42.8	.....	54.0	.....	63.1	.....
Sullivan	30.4	.....	35.0	.....	40.6	.....	52.0	.....	60.6	.....
Tuscola	28.6	+1.2	33.6	+7.8	39.8	−0.6	49.7	−1.6	60.0	−2.6
Urbana	28.4	.....	32.9	.....	38.0	.....	49.2	.....	58.8	.....
White Hall	30.4	.....	35.5	.....	42.0	.....	52.4	.....	61.1	.....
Windsor	31.0	+4.4	c34.7	+6.6	40.6	−0.6	52.3	+0.7	60.7	−2.2
Averages	25.6	+2.5	34.6	+6.9	40.2	−0.2	51.5	−0.9	60.8	−2.5
SOUTHERN DISTRICT.										
Albion	34.8	+2.6	38.9	+7.4	43.2	−1.4	54.6	−0.4	63.2	−2.7
Benton	37.9	.....	42.5	.....	b46.2	.....	57.0	.....	64.4	.....
Cairo	37.4	+2.6	43.8	+6.2	47.6	+0.6	57.6	−0.7	65.4	−2.1
Chester	36.4	.....	43.1	.....	46.4	.....	58.2	.....	65.6	.....
Cobden	35.8	+2.0	43.4	+7.6	47.6	+1.4	58.2	+1.4	65.3	−1.7
Duquoin	35.8	+4.0	41.2	+8.0	46.0	−0.8	56.3	+0.2	64.5	−2.7
Equality	36.9	+1.4	42.4	+9.0	47.2	−1.2	57.6	+1.8	65.5	−1.8
Fairfield	34.8	+1.3	41.0	+9.0	44.5	−0.3	55.4	+0.1	61.3	−4.6
Flora	33.6	+3.0	39.4	+8.8	43.1	+0.5	54.6	+0.3	62.4	−1.6
Golconda	35.8	+1.8	41.1	+5.0	45.2	−1.3	56.4	−1.2	63.8	−3.5
Greenville	30.4	+1.3	37.2	+6.6	42.0	0.0	54.3	−0.6	62.4	−1.7
Halfway	35.7	+1.8	42.0	+8.9	45.2	−1.5	55.9	−0.6	63.8	−3.3
McLeansboro	34.5	+2.7	40.0	+6.3	44.2	+0.1	53.6	−1.9	62.2	−2.8
Mascoutah	33.7	+2.8	39.4	+8.4	45.5	+2.3	56.1	+2.2	64.0	−0.1
Mt. Vernon	33.0	+0.3	36.4	+1.7	44.0	−0.8	54.2	0.1	64.0	−2.0
New Burnside	33.4	−1.7	38.1	+4.6	44.6	3.1	b53.4	3.0	b65.4	−2.1
Olney	34.4	+2.5	40.0	+8.0	43.2	−1.3	55.0	+0.1	63.3	−2.3
St. Louis, Mo	32.8	+1.8	39.4	+5.9	43.6	+0.1	54.2	−1.9	63.5	−3.0
Sumner	34.0	.....	38.9	.....	43.4	.....	54.9	.....	62.6	.....
Tilden	34.2	+1.8	40.0	+7.1	45.6	+0.9	53.2	−2.5	63.4	−1.9
Averages	34.8	+1.9	40.4	+7.1	44.9	−0.3	55.5	−0.4	63.8	−2.4
State averages	29.2	+2.7	34.3	+7.3	39.4	−0.2	50.3	−1.5	60.3	−2.4

NOTE.—Letters of the alphabet, a, b, c, etc., indicate number of days missing.

Precipitation—Concluded.

June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Annual.	
Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
72.8	+0.1	73.0	−2.9	76.0	+0.6	64.2	−4.7	50.0	−4.6	50.8	+8.1	22.0	−7.0	52.0	−0.5
71.2	+0.3	71.4	−4.0	77.0	+4.5	64.0	−0.3	49.8	−2.2	48.0	+10.5	19.2	−8.9	50.3	−0.3
71.4	+0.6	71.4	−3.2	75.2	+2.4	63.4	−2.4	49.2	−3.7	49.6	+9.9	20.3	−9.5	50.9	0.0
71.6	+0.3	72.0	−3.6	76.3	+2.4	64.4	−2.3	50.0	−4.2	50.5	+10.5	20.8	−8.3	51.5	+0.4
75.1	.....	74.4	.....	78.6	+3.2	68.8	−0.4	54.2	−2.8	55.3	+10.5	26.4	−6.1	55.7	.....
72.0	.....	72.8	.....	78.0	+3.8	64.8	−1.8	51.8	−2.8	50.0	+9.4	21.0	−10.1	52.1	.....
73.0	+0.7	73.6	−2.9	78.4	+4.4	65.2	−1.2	51.8	−2.8	50.4	+9.7	22.0	−9.3	52.6	+0.5
74.8	.....	b75.5	.....	80.0	.....	68.4	.....	55.8	.....	m55.7	.....	.....	.....	.....	.....
73.1	.....	73.2	.....	78.0	.....	65.6	−2.5	51.8	−4.1	51.8	+8.4	22.0	−7.8	52.8	.....
72.6	+0.9	72.8	−2.4	77.2	+2.9	b63.6	−3.6	50.6	−3.8	50.7	+9.2	22.0	−7.6	51.8	0.0
70.2	.....	71.0	.....	75.4	.....	63.4	.....	49.0	.....	49.8	.....	20.0	.....	50.5	.....
72.4	.....	73.4	.....	77.6	.....	65.0	.....	51.8	.....	51.5	.....	22.9	.....	53.0	.....
72.5	+1.5	73.4	−1.8	77.3	+3.1	65.4	−1.8	a51.5	−1.4	52.0	+9.8	22.4	−8.2	52.8	−0.8
72.7	+0.7	73.2	−2.8	77.6	+3.1	65.2	−2.3	51.5	−3.4	51.2	+9.4	21.9	−8.4	52.2	+0.2
75.6	+1.2	76.6	−1.5	79.2	+2.4	66.6	−2.5	53.9	−2.7	53.6	+9.6	26.2	−7.5	55.5	+0.4
76.6	.....	78.0	.....	80.9	.....	71.3	.....	.....	.....	.....	.....	h28.8	.....	.....	.....
76.8	+1.6	79.0	+0.4	81.0	+1.0	69.6	−0.6	59.5	+0.4	57.3	+10.4	31.0	−7.5	58.8	+1.3
76.4	.....	78.6	.....	82.8	.....	.....	.....	58.6	.....	57.3	.....	.....	.....	.....	.....
77.2	+2.6	78.9	+0.3	80.8	+3.3	70.2	−0.6	59.0	−1.2	57.6	+10.5	30.1	−6.2	58.7	+1.6
77.2	+1.9	78.5	+0.2	81.2	+3.3	70.6	−0.1	57.6	−0.2	57.1	+11.6	27.2	−8.2	57.8	+1.4
76.8	+2.9	77.9	−1.0	82.0	+3.4	71.0	+1.9	58.8	−0.7	58.0	+9.6	30.2	−6.1	58.9	+1.6
73.4	0.2	a75.1	−2.6	79.2	+3.1	68.4	−1.7	54.8	−3.2	54.8	+9.1	27.0	−7.1	55.8	+0.2
74.8	+2.1	75.5	−1.0	79.1	+4.3	67.6	0.4	54.2	−1.2	53.8	+11.1	25.2	−8.7	55.3	+1.4
76.6	+1.5	78.8	+0.3	81.3	+3.5	70.8	−0.7	56.4	−3.2	56.0	+9.0	29.6	−7.6	57.6	+0.3
73.7	+0.4	75.2	−2.2	79.7	+4.0	67.2	−1.6	53.7	−2.7	53.0	+10.2	24.2	−8.4	54.4	+0.4
76.4	+1.5	77.0	−1.7	e80.4	+4.9	69.8	−1.5	58.8	−0.2	a56.6	+8.5	28.8	−7.2	57.5	+0.6
74.4	+0.2	75.3	−2.3	79.2	+3.4	67.4	−2.1	55.2	−1.8	55.2	+10.2	27.3	−8.4	55.7	+0.3
76.0	+1.9	77.7	−0.2	81.4	+5.2	71.0	+1.1	55.7	0.9	55.8	+11.2	26.9	−7.4	56.9	+2.2
76.2	+2.1	76.0	−1.8	80.7	+3.5	67.6	−2.7	56.1	−1.8	54.6	+8.7	26.2	−6.8	55.8	+0.3
75.1	+0.1	76.3	−2.6	79.3	+0.9	67.3	−4.7	57.6	−1.3	56.0	+8.3	29.8	−6.1	56.1	−0.9
75.4	+0.5	75.7	−2.1	79.6	+2.9	68.2	−1.4	54.7	−1.6	54.9	+10.6	26.3	−8.7	55.9	+0.6
75.0	−0.1	77.0	−2.1	81.1	+3.9	68.3	−1.7	56.1	−2.0	54.4	+11.0	26.3	−9.2	56.0	+0.2
74.0	.....	74.2	.....	76.8	.....	67.3	.....	53.8	.....	53.0	.....	26.5	.....	55.0	.....
75.4	+1.5	77.6	+0.4	80.2	+4.2	69.0	−0.6	56.8	−0.5	56.1	+11.3	26.5	−9.0	56.5	+1.1
75.6	+1.3	76.9	−1.2	80.3	+3.4	69.1	−1.2	56.4	−1.5	55.5	+10.1	27.6	−7.7	56.7	+0.8
71.9	+0.1	73.1	−2.1	77.2	+3.3	65.0	−1.8	51.4	−3.0	50.3	+9.2	21.7	−8.3	52.0	+0.3

Monthly Maximum Temperatures for the Year 1909 with Dates.

Stations.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
CTHERN DISTRICT.																								
lo	66	24	60	4	60	2	83	29	88	5	90	30	93	1†	94	14	90	13	81	2	74	5†	55	2
loch	56	24	52	18	56	26	74	5	87	5	91	22	99	29	95	8	88	14†	80	8	68	13	53	4
ton	65	23	57	4	55	1	75	5	87	5	91	30	96	29	97	24	86	13	79	8				
ora	66	23	57	4	56	26	72	5†	86	5	88	22†	95	29	94	3	89	13	79	8	70	11†	54	4
bridge							67	5	86	29	93	23†	99	29	90	9								
ago	65	23	57	4	55	26	74	5	86	5	87	22	92	29	93	8	89	13	76	9	71	11	55	5
ota	56	23	50	4	54	26	72	5	85	5	88	30	95	29	92	2	86	13	76	8†	69	13	52	2†
enport, Iowa	66	23	59	4	57	23	81	29	88	5	90	30	96	29	96	14	91	13	82	2	72	13	55	2
on	63	23	58	4	59	26	75	5	89	5	91	30	95	29	99	15	90	13†	81	8	70	13†		
nque, Iowa	55	23	54	4	54	23	66	17	90	5	90	30	96	29	93	14	87	13	79	2	71	13	54	5
ght	67	23	59	4	60	26	83	29	88	5	91	22†	97	29	96	8†	93	13	82	8	71	5†	56	4†
a	67	23	59	4	61	26	84	29	89	5	91	22	98	29	100	12	93	13	82	2†	75	6	54	4
ry	69	23	60	4	62	1	85	29	86	29	92	29	95	29	96	12	90	13	81	8	75	5	56	1
f	67	23	57	4	59	26	75	5†	87	5	86	22	92	28	92	8	89	13	80	8	73	11	55	4†
vaukee	61	23	54	4	56	26	75	5	86	5	90	30	97	29	92	3†	88	13	82	8	70	13	54	1
xville	68	23	60	4	62	26	77	5	88	5	89	27†	93	29	98	14	91	13	81	2†	74	6	55	2
range	65	23	53	4	57	26	75	5	87	5	87	6†	95	29	96	8	90	13	79	8	71	11	53	1
ark	60	23	54	4	55	26	72	5	86	5	90	30	98	29	98	15	89	13	82	8	69	13	52	1†
ille	68	23	60	4	59	26	84	29	86	5	90	29	95	29	94	14	91	13	82	8	72	5	55	1
tinton	68	23	59	4	63	9	80	29	87	5	93	27	96	29	96	8	92	13	82	2†	75	6	58	4
oak	69	23	59	4	62	26	85	29	90	5	93	22	96	29	100	12	95	13	86	8	76	6†	58	1
mouth	68	23	60	4	62	2†	86	29	93	5	94	27	98	3†	105	14	98	12	86	2	76	5	56	2
rison	63	23	56	4	59	26	75	5	86	5	87	23	93	29	93	14	87	13	79	2†	71	13	53	2
ton													98	29	94	15	89	13	80	2†	70	6†	52	2
wa	68	23	58	4	62	26	84	29	89	5	93	21†	97	29	96	8†	92	13	83	8	72	5	56	1
tiac	69	23	59	4	62	9	84	29	88	5	92	20†	96	29	96	14	93	12†	84	8	79	14	58	1
y	59	23	52	4	53	26	73	5	85	5	88	22†	98	29	94	3	84	12†	78	8	66	13†	53	1
kford	61	23	54	4	56	26	75	5	87	5	89	22	97	29	93	1	85	13	77	8	68	11†	54	1
Charles	64	23	55	4	56	26	73	5	86	5	88	22†	98	29	93	8	89	13	81	8	70	1†	54	1

ator	60	23	59	4	62	1	85	29	89	5	93	29†	97	29	96	9†	95	13	84	7	74	5†	58	1
amore	63	23	58	4	58	2	74	6	88	5	93	22†	101	29	96	8	90	13	82	8	71	13	54	1†
ilwa	67	23	58	4	61	29	82	29	89	5	88	22	92	29	92	15	88	13	80	8	73	5†	51	2
nut	64	23	59	4	57	24	74	29	91	5	94	22†	98	29	96	5†	90	12†	82	8	71	6	54	2
nebago	60	23	54	4	57	25	75	5	87	5	91	22	97	29	93	1†	90	13	80	7†	69	13	51	5
kville	65	23	56	4	58	29	75	5	87	29	96	27	96	29	99	7	92	13	80	8	70	11	55	1†
l	60	23	53	4	57	29	71	5	88	5	89	28†	95	29	95	14	88	12	78	7†	69	6†	......	....
NTRAL DISTRICT																								
xander	74	23	62	4	66	1†	87	29	89	5	92	29	93	2	97	13	93	13	88	3	77	7	59	5
oria	74	23	60	4	68	26	87	29	88	5	89	22	90	2	91	11	91	13	83	3	77	7	55	2†
ment	74	23	64	4†	63	1†	82	29	86	7	92	29	94	29†	98	12	91	13	83	3†	78	7	58	1†
omington	69	23	60	4	62	1†	83	29	88	5	94	29	95	1†	98	12†	92	13	84	8	76	6	59	1
hnell	70	23	60	4	64	1	87	29	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	....
nville	74	23	65	4	70	1	86	29	89	5	92	24†	95	2	99	12†	93	13	89	3	80	7	61	5
rleston	71	23	65	21	67	9	81	18†	86	5	92	25	94	29	96	12†	90	13	81	8	77	5	69	1†
sburg	72	23	54	12†	64	26	88	29	91	5	93	27	93	2	96	15†	92	13	85	3	77	7	60	1
hester	71	23	60	4	64	1	86	29	90	5	......	......	......	......	......	......	......	......	......	......	......	......	......	....
atur	73	23	60	4	67	1	82	29	87	5	92	24†	94	1†	98	12	91	13	86	3	76	6†	58	1
gsville	76	23	65	4	68	2	84	5†	89	5	93	27	96	2	97	15	91	13	86	3	79	7	61	5
nibal, Mo	77	23	61	4	67	2	88	29	89	7	91	27	93	2	98	12	92	12	89	3	80	5	57	5
ana	72	23	61	4	66	1	88	29	90	5	94	22†	97	2	102	12	94	12†	84	2†	76	7	55	2†
sboro	75	23	64	4	68	1	85	29	89	5	95	25	97	2	98	12†	82	3†	90	3	78	5†	60	4†
peston	67	23	59	23	64	2	80	29	85	5	91	24	93	29	90	28	89	13	78	8	74	11	59	4
kuk, Iowa	72	23	62	4	62	2	85	29	89	5	90	24	93	29	98	15	93	13	88	3	79	5	55	2
Harpe	70	22	60	4	65	1	85	29	91	5	90	5†	93	29	97	12†	90	13	79	3	78	7	55	2†
ton	69	23	59	4†	60	1	85	29	......	......	......	......	......	......	......	......	......	......	82	7†	74	7	58	5†
ansville	72	23	65	22	68	2†	82	17†	89	29	95	25	102	29	100	12	91	12	86	8	79	5†	62	2
risonville	73	23	61	4	67	1	83	29	86	5	90	24†	92	2	96	13	91	13	87	3	76	7	59	5
stdale	...	...	...	...	64	2†	83	17†	86	29	93	25†	97	30	100	28	90	12†	84	4†	77	5†	61	4
a	72	23	68	23	63	2	81	29	87	7	88	25†	91	29	96	15	83	20	83	3	73	2†	58	4†
s	70	23	62	25	64	2	80	18†	85	5	92	25†	95	29†	95	11†	89	13	80	8	74	7	61	4
ria	71	24	61	4	61	2	87	29	86	7	90	22	94	29	97	14	92	13	82	8	74	6	58	5
lo	70	23	60	25	64	2	82	29	86	7	92	24†	95	29	96	12†	90	13	81	8	75	7	60	4
ntoul	70	23	59	4	65	9	85	29	87	7	95	28	96	29	97	12†	94	14	83	8	78	5	60	4
nson	73	24	65	23	67	2†	81	16†	85	29	91	25†	95	29†	100	28	91	11†	83	7†	79	4	60	4
hville	74	23	62	4	65	1†	[illegible]	29	88	7	90	24	91	2†	96	14†	90	13	86	3	77	7	56	2
ngfield	73	22	62	4	[illegible]	1	87	29	89	7	92	24	94	2	96	12	90	13	86	3	75	7	59	5
nton	73	23	66	23	68	1	88	29	90	5†	96	25	97	2	100	12†	96	13	90	4	81	2	......	....
ivan	74	23	65	4	65	1	85	29	87	29	91	29	96	2	98	12†	92	13	86	8	78	5†	60	1
cola	73	22	61	4	64	1†	83	29	86	5†	94	28	97	30	99	12	93	13	85	7	78	6	61	1
ana	70	22	60	23	63	2	80	29	85	5	91	24	93	29	91	11	90	13	80	8	74	7	60	4
te Hall	77	23	65	4	70	2	87	29	84	5	91	24†	94	2	97	12†	92	13†	87	3	79	7	60	5
dsor	73	22	67	4	60	1	83	29	86	5†	95	28†	95	1†	99	12†	93	13	88	3	79	5†	61	4

Monthly Maximum Temperatures—Concluded.

Stations.	Jan.		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
SOUTHERN DISTRICT.																								
Albion	71	23	65	23	67	9	82	18†	87	29	96	28	95	6†	101	28	91	13	88	3	80	7	66	4
Benton	78	24†	71	4	68	8	86	29	88	29	95	27†	95	4†	102	28	95	9	.....	.....	.....	.....	70	4
Cairo	72	23	68	23	67	26	81	17	84	5	92	28	94	6	99	28	90	3	88	3	82	5	72	4
Chester	73	23	69	3	72	26	87	17	89	28	98	24†	98	2	103	12†	.....	.....	87	3	82	6	.....	.....
Cobden	76	23	68	23	69	2	85	18	87	29	97	28	98	2	102	28	93	3†	90	3	82	3†	65	4
Duquoin	74	23	65	23	69	2	88	17†	87	29	96	29	99	2	103	28	97	3	93	3	85	3†	68	4
Equality	74	23	66	4	68	9	84	17	87	5†	95	25†	99	2	105	28	94	3	94	3	83	6	68	4
Fairfield	72	23	68	4†	67	2†	85	17	83	6	94	29	96	2†	102	28	95	3	89	3	83	7	66	4
Flora	74	23	65	23	67	2	84	17	88	29	95	28	99	30	102	28	96	3	90	3	80	6	62	4
Golconda	74	23	67	22	68	2†	86	18	88	5	97	25†	99	28	104	28	92	9†	90	3	83	5†	66	4
Greenville	71	23	62	4	65	1†	86	18	87	5	92	25†	94	2†	97	12†	92	3	86	3	78	6	58	4
Halfway	72	23	67	23	65	2†	82	17†	85	5†	96	25†	98	6	103	28	97	3	90	3	82	5	69	4
McLeansboro	71	23	65	23	65	9†	81	17†	85	29	92	27†	94	6	99	28	91	3	89	3	80	7	68	4
Mascoutah	75	23	68	4	73	2	88	17†	90	5†	97	25†	99	2	105	28	100	3	90	3	83	5	64	4
Mt Vernon	64	22†	63	5	71	2	84	29	89	6†	98	27	97	2†	104	28	95	3	90	2	83	7	63	4†
New Burnside	70	23†	69	23	65	2†	79	17	84	28†	93	28	94	2	101	28	91	3	87	4	79	3†	66	4
Olney	74	23	67	23	67	9	84	17	86	5†	94	26	97	30	101	28	94	3	89	3	82	5†	63	4
St. Louis, Mo	73	23	65	4	73	26	85	29	87	5	92	27	96	2	98	13	92	3	87	3	78	7	62	5
Summer	71	23	65	23	65	9	81	29	83	6	91	28	92	29†	98	28	90	3	86	3	76	7†	62	4
Tilden	73	23	66	33	71	2	84	17	88	29	96	29	97	2	102	26†	100	3	91	3	83	3	65	4

† On other dates also.

Monthly Minimum Temperatures for the Year 1909 with Dates.

tations.	Jan.		Feb.		Mar.		Apr		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
ERN DISTRICT																								
	14	6	6	1	7	17	18	10	29	3	44	15	51	4†	50	29	37	27	20	13	15	18	—13	30
	16	6	0	1	9	17	15	10	26	4	39	18	45	5	45	30	35	2	19	28	16	22	—6	18
	15	6	4	1	8	17	11	10	30	3	42	15†	43	5	45	30	34	25†	18	28	.....	.....	—16	30
dge	12	6	3	1	8	17	19	10	29	3	39	15	45	19	43	30	34	2†	20	14	20	23	—16	30
	.....	.....	.....	.....	.....	.....	16	10	28	3	46	15	49	4	49	29	.....	.....	.....	.....	.....	.....	.....	.....
	10	6	12	25	11	17	25	10	32	1	48	15	55	3	59	31	47	28	29	13	28	23	—7	30
	19	6	2	1†	6	17	17	10	27	3	42	15	48	4	48	29	37	27	17	28	8	24	—16	18†
ort, Iowa	15	6	6	10	9	17	22	10	30	1	49	15	52	5	51	29	40	27	23	13	17	18	—10	29
	15	6†	2	1	9	17	19	10	30	2†	46	15	48	19	49	30	38	27	21	28	15	23	.....	.....
ue, Iowa	19	6	3	25	6	17	21	10	30	1	46	15	53	5	51	30	36	27	23	28	13	23	—11	29
	9	6	6	1	11	17	19	10	30	3	40	15	46	4†	48	30	34	27	21	28	20	23	—15	30
	13	7	5	1	8	17	18	10	29	2†	47	15	49	3†	48	29	36	27	20	28†	16	18†	—14	30
	10	6	3	1	10	17	19	10	31	3	44	19	48	19	49	30	37	27†	21	28	17	18	—12	30
aukee	6	6	7	17	12	17†	22	10	32	3	40	19	48	4	49	30	38	27	24	14†	23	23	—12	30
ille	17	6	4	1	18	11†	18	10	29	3†	44	15†	44	19	46	30	36	27	20	28	10	23	—13	30
nge	12	6	4	1	6	17	17	10	28	3	41	19	45	19	45	30	35	27	18	13	13	18	—14	30
	11	7	5	1	10	17	26	8†	31	1†	40	19	48	4	49	30	37	27	24	14	22	23†	—14	30
	20	6	9	1	5	17	12	10	25	3†	39	15	40	19	43	30	28	27	13	28	2	23	—21	30
	11	6	9	1	12	17	22	10	32	1	46	19	49	4	51	30	39	27	24	28	20	18	—10	30
on	5	6	0	17	12	17	23	10	32	1†	43	18†	45	19	48	30	33	27	22	14	24	23†	—15	30
	8	6	4	1	10	17	17	10	30	3	43	15	46	4	43	31	35	27	20	13†	18	18	—15	30
uth	10	6	7	1†	8	17	18	10	31	1†	45	15†	49	4	43	29	34	27	20	13	16	18	—11	30
n	15	6	4	1	8	17	13	9	28	3	44	19	47	19	48	29†	35	27	18	28	14	23	—15	30
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	19	46	30	33	27	19	28	11	23	—14	30
	10	6	7	17	11	17	20	10	33	1†	44	19	48	4†	49	30	37	27	23	28	21	17†	—11	30
	7	6	7	17	12	17	22	10	31	1	43	15	47	19	50	30	35	27	23	13†	20	18	—13	30
	10	6	4	1	6	17	17	10	29	3	41	15	48	4	50	29	37	27	17	28	12	23	—15	30
rd	11	6	3	25	9	17	20	10	30	3	47	19	49	4†	50	30	36	27	20	28	11	23	—10	29
les	12	6	3	17	8	17	18	10	30	2†	39	15	46	4	48	30	36	27	21	14†	19	23	—12	30

Monthly Minimum Temperatures—Concluded.

Stations.	Jan		Feb.		Mar.		Apr.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
tor	−9	6	−3	1	11	17	19	10	30	3	41	19	41	19	48	30†	36	27	22	13	19	18	−15	30
more	−14	6	5	1	6	17	17	10	30	2†	39	15	45	4	46	30	34	27	19	28†	14	23	−13	30
wa	−14	6	5	1†	9	17	18	10	29	3	45	15	48	4	42	29	38	27	20	13†	15	18	−16	30
ut	−13	6	8	1	10	17	18	10	31	1†	46	15	48	4	50	29	37	27	21	28	18	18	−12	30
ebago	−17	6	4	25	8	17	18	10	28	3	45	18	44	19	46	30	36	27	19	28	11	23	−14	30
ville	−12	6	4	1	9	17	18	10	26	2	39	19	44	4†	42	30	32	27	19	14†	19	23	−17	30
	−20	6	−2	1	5	17	15	10	26	1	42	15	44	19	46	30	33	27	23	13	12	23	.....	....
TRAL DISTRICT																								
ander	−9	12	5	1†	12	17	20	10	33	1†	47	18	48	1	48	30	35	27	23	13	18	18	−14	30
in	−8	6	7	17	10	17	20	10	31	1	44	19	50	4†	46	30	33	27	23	13	17	18	−12	30
nt	−2	7†	5	1	13	17	21	10	32	2	46	19	50	19	51	21†	37	27	22	13	24	23	−11	30
ington	−5	6	8	1	12	17	20	10	30	2	47	18	45	4†	48	30	37	26	22	13	19	18	−12	30
nell	−9	6	4	1	11	17	21	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
nville	−6	12	6	17	15	17	23	10	31	1†	49	18	51	4	48	30	36	27	25	13	20	18	−11	30
eston	−6	12	4	1	15	17	21	10	33	2†	48	19	50	4	48	21	34	27	25	13	21	18	−4	9
burg	−7	6	9	10	12	17	24	9	31	1	49	15	51	4	49	30	37	27	22	13	17	18	−9	30
ester	−9	6	6	17	11	17	26	9	32	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ur	−2	12†	7	1	14	17	21	10	32	2	49	18	48	19	49	30	37	27	23	13	19	18†	−10	30
sville	−8	13	9	1	11	17	23	10	32	1	51	15	52	4	57	30	41	28	23	13	17	18	−10	30
ibal, Mo	−7	12	9	9	14	17	26	9	32	1	50	15	57	4	52	31	36	27	24	13	19	18	−7	29
na	−5	6	7	17	13	17	22	10	32	3	49	19	50	4	52	30	42	28	24	13	19	18	−7	30
oro	−4	12	8	1	16	17	25	10	32	2	49	18	52	4	49	30†	36	27	25	13	20	18	−8	30
eston	−2	6†	4	17	13	17	19	10	32	2†	43	15	48	4†	48	21	33	27	23	13	24	23†	−13	30
uk, Iowa	−10	6	8	10	11	17	25	10	31	1	50	15	54	4	52	30	42	27	23	13	17	18	−9	30
arpe	−9	6	4	17	13	17	21	10	29	3	49	19	50	4	50	29†	37	27	20	13	16	18	−14	30
dn	−3	7†	6	1†	13	17	22	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	13	19	18	−9	30
nsville	−2	31	0	1	16	17	21	10	32	2	49	19	51	19	50	21	33	28	21	13	21	18†	−10	30
sonville	−6	12	6	1†	15	17	22	10	32	2	47	18	48	4	45	30	35	27	23	13	19	18	−14	30
tine	.....	.....	.....	.....	18	17	23	10	34	11†	52	15	51	24	51	21	36	28	22	13	23	18	−9	30
	−2	12†	7	1	15	17	24	10	32	2	52	15	51	4	48	30	34	27	24	13	21	18	−11	30
	−2	31	0	1	16	17	22	10	32	2	48	19	50	4	48	21	36	27†	23	13	22	18	−9	30

other dates also.

Illinois Section.

List of Coöperative Observers.

Northern District.

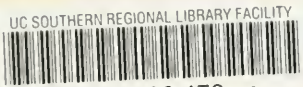
Stations.	Observers.	Stations.	Observers.
Aledo	Wm. B. Frew	LaSalle	Weather Bureau
Antioch	J. C. James, Jr.	Martinton	Jos. H. Peltier
Ashton	E. J. Yenerich	Minonk	O. M. Davison
Aurora	W. Holden	Monmouth	Hugh R. Moffet
Cambridge	J. H. Seaton	Morrison	H. A. Maxwell
Chicago	Weather Bureau	Oregon	Samuel Ray
Dakota	Rev. G. W. Kerstetter	Ottawa	Miss M. M. Harris
Davenport, Iowa	Weather Bureau	Pontiac	George Butterworth
Dixon	Mrs. Eustace E. Shaw	Riley	John West James
Dwight	Edw. O. Welch	Rockford	H. C. Porter
Dubuque, Iowa	Weather Bureau	St. Charles	Dr. Wm. H. Bishop
Galva	Prof. F. U. White	Streator	Edw. F. Sweetser
Henry	Dr. F. A. Powell	Sycamore	Miss Edna J. Davis
Joliet	F. M. Muhlig	Tiskilwa	F. I. Smucker
Kiskwaukee	Geo. Stevens	Walnut	O. C. Nussle
Knoxville	C. N. Butt	Winnebago	Frank Osborn
LaGrange	Prof. F. E. Sanford	Yorkville	H. A. Grimwood
Lanark	M. N. Wertz	Zion	Robert F. Gillogly

Central District.

Stations.	Observers.	Stations.	Observers.
Alexander	Geo. H. Hall	Martinsville	G. M. Daugherty
Astoria	Ed. V. Bohl	Morrisonville	J. D. Lowis
Bement	Rev. C. S. Adams	Palestine	Duane Shaw
Bloomington	Prof. H. N. Pearce	Pana	C. W. Sibley
Carlinville	R. O. Purviance	Paris	H. P. Twyman
Charleston	Jacob B. Dazey	Peoria	Weather Bureau
Canton	Dr. J. R. Lambert	Philo	H. A. Burr
Decatur	Prof. J. H. Coonradt	Rantoul	Wm. Breiner
Grafton	R. C. Goodrich	Robinson	A. P. Woodworth
Griggsville	Geo. F. Kneeland	Rushville	Howard F. Dyson
Hannibal, Mo	Weather Bureau	Springfield	Section Center
Havana	F. & C. Borgelt	Staunton	Wm. F. Schaefer
Hillsboro	Ira L. Woodward	Sullivan	C. A. Corbin
Hoopeston	S. F. Hoskinson	Tuscola	E. W. Lester
Keokuk, Iowa	Weather Bureau	Urbana	Prof. J. G. Mosier
Lacon	John S. Campbell	Warsaw	W. R. Kirkbride
Lincoln	Prof. C. S. Oglevee	White Hall	Dr. R. A. Pritchett
Loami	H. C. Foster	Windsor	Herbert Rose

Southern District.

Stations.	Observers.	Stations.	Observers.
Alton	B. F. Michels	Halfway	E. L. Hearn
Benton	F. H. Stamper	McLeansboro	C. C. Judd
Cairo	Weather Bureau	Mascoutah	Geo. Henrich
Carlyle	Wm. Rogan	Mt. Carmel	Mrs. H. M. Phillips
Chester	Frank A. Gollon, Jr.	Mt. Vernon	Theo. P. Stelle
Golden	John Buck	New Burnside	George Harris
Duquoin	G. H. Knetzger	Olney	Victor E. Phillips
Equality	Dr. L. W. Gordon	St. Louis, Mo	Weather Bureau
Fairfield	Geo. A. Tromly	Sumner	O. A. Griffe



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